



City of Cleveland, OH

Division of Water

**Cost Evaluation of Westlake's
Separation from Cleveland
Division of Water**

September 2013



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Section 1 - Executive Summary

This report summarizes the analysis that was completed to evaluate costs associated with the separation of the City of Westlake ("Westlake") Water System from the City of Cleveland Division of Water ("CWD"). We have divided these costs into two categories: Costs to Cure and Stranded Costs.

The Costs to Cure are defined as the associated costs to restore the CWD system to the same level of dependency and reliability prior to separation of Westlake from CWD in order to service adjoining users of CWD's system outside of Westlake. The Costs to Cure also include costs for complete physical separation of these two water systems at the 65 interconnection points in Westlake. CWD's Costs to Cure are distinctly different from Westlake's internal costs to cure.

Stranded costs are defined as costs that are currently recovered from Westlake through CWD's user charges, but which cannot be eliminated upon Westlake's separation from the system. Stranded costs include capital costs incurred by CWD to serve Westlake which have yet to be recovered, as well as ongoing operating costs anticipated to be incurred by CWD, which cannot be reduced or eliminated upon Westlake's separation from the system. To ensure CWD maintains the same level of service to its customers, these stranded costs, if not recovered from Westlake, would need to be recovered from the remaining customers of CWD, resulting in higher water bills for these customers.

Opinions of total Costs to Cure and Stranded Costs are presented in Table ES-1. Our opinions and calculations are based on the information available to date and on a complete separation of the two water systems.

A total fixed fee computation was prepared to present the quarterly fixed fee charged to Westlake that would result if the Costs to Cure and Stranded Cost amounts were recovered from Westlake over (1) a one-year period, and (2) over a five-year period. The quarterly fixed fee cost is calculated by dividing the total costs by the total number of equivalent meter units ("EMUs") served in Westlake. One EMU is equivalent to a customer with a 5/8", 3/4", or 1" water meter. Total EMUs were determined by multiplying the number of accounts by meter size in Westlake by the equivalent meter ratios used by CWD to assess the fixed fees in 2013.

Quarterly fixed fees by meter size were determined by multiplying the quarterly fixed fee for one EMU by the equivalent meter ratio as presented in Table ES-1.

Table ES-1:

Total Costs to Cure and Stranded Costs with Fixed Fee Calculations

Description		Amount
Costs to Cure		\$19,050,400
Stranded Costs		\$39,823,000
Total Costs		\$58,873,400
Westlake Equivalent Meter Units (EMU)		11,887
Quarterly Fixed Fee per EMU (Recovery over 1 year)		\$1,238
Quarterly Fixed Fee per EMU (Recovery over 5 years) ¹		\$291
Quarterly Fixed Fee by Meter Size	Equivalent Ratio	
1" or smaller meters (Residential)	1.000	\$291
2" and 1-1/2" meters (Commercial)	1.952	\$569
3" and 4" meters (Commercial)	6.667	\$1,942
6" meters (Commercial)	11.905	\$3,468
8" meters (Commercial)	18.095	\$5,272

¹Based on 17 quarterly billing periods over the five years.

Section 2 - Background

Purpose

The purpose of this report is to summarize the analysis that was completed to evaluate the Costs to Cure and Stranded Costs associated with the separation of Westlake from the CWD.

CWD Water System

CWD's water system comprises four treatment plants, five major pump stations, eleven secondary pumping stations, twenty-six storage facilities, and more than 5,000 miles of water mains. CWD draws water from four intake tunnels located in Lake Erie.

CWD provides water service to approximately 415,000 retail accounts within the City of Cleveland and 65 suburban communities (referred to as Direct Service Suburbs). Westlake is a Direct Service Suburb. CWD also provides water on a wholesale basis to five other suburban communities and provides emergency standby connections to an additional eight suburban communities.

The area served by CWD is divided into four operational service districts that are based on terrain and ground elevation. The service districts, which correspond to rate districts for billing, include Low, First High, Second High, and Third High, with the word "High" referring to the elevation and need to pump water to a range of heights above Lake Erie. Customers of CWD within Westlake are located in the Low and First High districts.

CWD provides water service to Westlake in accordance with a Water Service Agreement that was executed on March 19, 1990 ("the Agreement"). The Agreement is the most recent agreement; however, CWD has been providing water to Westlake under prior agreements dating back to before 1980. Article 23.01 of the Agreement states that the term of the Agreement "shall be for a minimum period of ten (10) years...and shall automatically continue in effect from year to year thereafter." The Article also states "This AGREEMENT may be cancelled...at least five (5) years prior to the effective date of termination."

CWD establishes water rates for customers within Westlake based on a cost of service evaluation, and as specified in the Agreement in Article 4. Article 4.01 specifies that "the dollar amount of any and all increases in water rates charged by the City of Cleveland to any Direct Service Customer shall not exceed the dollar amount of the increase for any direct service customer within the City of Cleveland by more than 75% in the Low or First High Service District outside the City of Cleveland." CWD's customers in Westlake are located in both the Low and First High Service areas and are charged the same rate for water service. The Agreement further specifies in Article 4.02 that "Rate increases for the following classes of customers shall not be limited by the provisions of Paragraph 4.01 . . . 1) The rate to be charged to all customers or classes of customers who have taken steps toward leaving the Cleveland water system.. ."

In response to Westlake's notification of their plans to separate from CWD's water system, and at CWD's request, ARCADIS has prepared the following opinions of CWD's Costs to Cure and Stranded Costs associated with Westlake's planned separation. These opinions of costs in this report are consistent with reasonable degree of certainty within water system engineering practices and are listed in subsequent sections of this report.

Section 3 – Costs to Cure

The Costs to Cure are defined as the associated costs to restore the CWD system to the same level of dependency and reliability prior to separation of Westlake from CWD in order to service adjoining users of CWD's system outside of Westlake. The Costs to Cure also include costs for complete physical separation of the two water systems at the 65 interconnection locations in Westlake. CWD's Costs to Cure are distinctly different from Westlake's internal costs to cure, which are not addressed in this report.

The methods used to calculate the Costs to Cure and the resulting cost opinions are summarized below:

1. CWD's water system was studied to identify the CWD system modifications that would be needed to be made if Westlake were to separate from the system. It was determined that approximately 19,700 linear feet of new water mains comprising 21 pipe segments would be needed to maintain the current level of water service for the affected communities of Bay Village, Rocky River, North Olmsted and Fairview Park. The general locations of these modifications are shown on the map provided in Appendix A. These reconnections were determined to be needed to avoid dead-end mains, and maintain fire protection, hydraulic redundancy and water quality.
2. Opinions of probable construction cost associated with the CWD system modifications were developed using unit construction costs. The cost tabulations include allowances for cost escalation to reflect the projected year of construction, contractor overhead, financing, legal and technical assistance and a contingency factor (as described below).
3. Costs that were developed by ARCADIS for CWD in 2011 were reviewed, utilized, and escalated to bring the costs to the projected construction year. The Engineering News Record ("ENR") Construction Cost Index was used to determine the construction cost increase that was experienced in 2010, 2011 and 2012. An average increase of 2.79% per year was used as the yearly escalation for the Costs to Cure.
4. A general schedule for implementation of the separation plan was developed. The five year notice of cancellation specified in the Agreement between the CWD and Westlake provides an adequate time frame to plan, coordinate, design and construct the system modifications needed to allow for a separation of services. The anticipated general schedule for the implementation of the separation plan is as follows:

- a. Years 1 and 2 – Implement planning of the required action and coordinate between the involved agencies. Coordinate with communities where the actual construction will be implemented (i.e. Bay Village, Rocky River, North Olmsted) in addition to Westlake. Complete detailed design efforts and associated hydraulic modeling. Obtain governmental agency approvals and secure the required construction permits.
 - b. Year 3 (2016) – Initiate construction of proposed water mains to address the Cure in the Cities of Bay Village and Rocky River. The projected time frame for construction is between 9 and 15 months.
 - c. Year 4 (2017) - Initiate construction of proposed water mains to address the Cure in North Olmsted. The projected time frame for construction is between 9 and 15 months.
 - d. Year 5 (2018) and continuing into year 6 – Initiate construction of separation of supplemental connections and physical disconnection between the CWD system and Westlake. It is likely that the physical separation component will extend past the end of year 5 into year 6 to allow for an orderly transition between the two systems.
5. The opinion of probable costs of construction for the Costs to Cure improvements was then calculated, and the results are provided in Table 1. These opinions are based on the information known to date.

Table 1:
Opinion of Probable Costs to Cure

Street location	WM Pipe Size (inches)	WM Pipe Length (feet)	Unit Price (1)	Total
Year 3 (2016) Cost to Cure projects ; Work in Bay Village and Rocky River				
Bassett, (Bay Village)	16	5,418	\$225	\$1,219,050
Bassett Supplemental Connection(Bay Village)	12	39	\$200	7,800
Bradley, (Bay Village)	12	5,011	\$200	1,002,200
Dover Center (Bay Village)	16	3,738	\$225	841,050
Dover Center Supplemental Connection (Bay Village)	12	36	\$200	7,200
Cahoon (Bay Village)	12	2,210	\$200	442,000
Canterbury, (Bay Village)	12	3,051	\$200	610,200
Columbia, (Bay Village)	12	2,544	\$200	508,800
Clague, Bay Village	12	967	\$200	193,400
Center Ridge (Rocky River)	12	2,452	\$200	490,400
Subtotal				\$5,322,100
Escalation to 2016 Construction (14.75%)				785,000
Subtotal				\$6,107,100
Contractor Overhead/ profit, etc. (15%)				916,100
Subtotal				\$7,023,200
Financing Legal and Engineering (25%)				1,755,800
Subtotal				\$8,779,000
Contingency (15%)				1,316,900
Total				\$10,095,900
Year 4 (2017) Cost to Cure projects ; Work in North Olmsted				
Walter (North Olmsted)	12	2,672	\$200	\$534,400
Maple Ridge (North Olmsted)	12	2,628	\$200	525,600
Columbia (North Olmsted)	12	1,376	\$200	275,200
Edgepark and Woodpark (North Olmsted)	12	1,205	\$200	241,000
Lansing (North Olmsted)	12	1,612	\$200	322,400
Canterbury (North Olmsted)	12	3,967	\$200	793,400
Dover Center,(North Olmsted)	12	2,964	\$200	592,800
Bradley (North Olmsted)	12	4,120	\$200	824,000

Street location	WM Pipe Size (inches)	WM Pipe Length (feet)	Unit Price (1)	Total
Subtotal				\$4,108,800
Escalation to 2017 Construction (17.952%)				737,600
Subtotal				\$4,846,400
Contractor Overhead/ profit, etc. (15%)				727,000
Subtotal				\$5,573,400
Financing Legal and Engineering (25%)				1,393,400
Subtotal				\$6,966,800
Contingency (15%)				1,045,000
Total				\$8,011,800
Year 5 (2018) and continuing into year 6; Supplemental and Physical Disconnections				
Clague Supplemental Connection (North Olmsted)	12	32	\$200	\$6,400
Hilliard Supplemental Connection (Rocky River)	12	17	\$200	3,400
Westwood Supplemental Connection (Fairview Park)	12	28	\$200	5,600
Physical disconnection from two systems	--	65	\$7,000	455,000
Subtotal				\$470,400
Escalation to 2018 Construction (21.243%)				99,900
Subtotal				\$570,300
Contractor Overhead/ profit, etc. (15%)				85,500
Subtotal				\$655,800
Financing Legal and Engineering (25%)				163,900
Subtotal				\$819,700
Contingency (15%)				123,000
Total				\$942,700
Grand Total				\$19,050,400

(1) 2011 unit prices subject to ENR escalations

Section 4 – Stranded Costs

Stranded costs are defined as costs that are currently recovered from Westlake through CWD's user charges, but which cannot be eliminated upon Westlake's separation from the system. Stranded costs include capital costs incurred by CWD to serve Westlake which have yet to be recovered, as well as ongoing operating costs anticipated to be incurred by CWD, which cannot be reduced or eliminated upon Westlake's separation from the system. These stranded costs, if not recovered from Westlake, would need to be recovered by the remaining customers of CWD, resulting in higher water bills for these customers.

The methods used to calculate the stranded costs, and the resulting stranded cost opinions are summarized below:

Method Used to Calculate Stranded Capital Cost

1. CWD's distribution system was divided into an East Section including the eastern portion of the City and suburbs, West Section including the western portion of the City and suburbs, and the western suburbs.¹
2. The lengths of water mains in the distribution system in Westlake, in the West Section, in the western suburbs, and in the entire distribution system were estimated. These estimates were also categorized to reflect lengths of distribution mains in each of the Low, First High, Second High, and Third High Service Districts.
3. Capital projects constructed by CWD between 1981 and 2013 were compiled. The year 1981 was selected as the first year in the analysis because in this year, the CWD established a formal, court-ordered, capital improvement program. Furthermore, CWD has been providing water to Westlake under prior agreements dating back to before 1980, and some infrastructure improvements from 1981 and subsequent years directly benefit Westlake today. Approximately 660 projects were identified and reviewed for the following factors:
 - i. Area of impact on the system. Whether or not these projects benefited the East Section, West Section, the Western Suburbs, or the entire system.

¹ Westlake is located in the West Section of the service area. Westlake contains two pressure zones due to its varying elevations. The majority of Westlake is served by water mains within the First High Service area, while the northern parts of the City are served by water mains within the Low Service area.

- ii. Relevancy. Whether or not these projects are relevant to serving Direct Service Customers and Westlake, more specifically.
4. For capital projects implemented in the West Section of the system, the Western Suburbs, and for capital projects constructed for the benefit of the entire system, Westlake's share was calculated using ratios based on (i) the total linear miles of distribution pipe (ii) the number of inch-miles of distribution pipe, and (iii) the amount of consumption. For example, using the ratio of total linear miles of distribution pipe, Westlake's proportion of capital costs was determined as follows:

For capital projects implemented in the West Section, Westlake's share of these project costs was calculated using the ratio of the total linear miles of distribution pipe in Westlake to the total linear miles of distribution pipe in the West Section of the system. For projects implemented in the Western Suburbs, Westlake's share of these project costs was calculated using the ratio of the total linear miles of distribution pipe in Westlake to the total linear miles of distribution pipe in the Western Suburbs. For projects implemented that were considered "common-to-all," Westlake's share of these project costs was determined using the ratio of the total linear miles of distribution pipe in Westlake to the total linear miles of distribution pipe in the system.

The total for Westlake's share of the project cost was then calculated by adding together the calculated Westlake shares of each capital project category.²

5. The identified capital project costs attributable to Westlake using the three methods identified above (in list item 4) were averaged. This was done since each of the three methods used to calculate Westlake's share of capital costs is reasonable, but results in a slightly different value.
6. CWD's stranded capital costs were then calculated by subtracting accumulated depreciation from the average of Westlake's share of the capital project costs. This was done to reflect that Westlake customers have contributed to the recoupment of CWD's costs of the capital projects through payment of user charges. The amount of accumulated depreciation was

² The cost of capital projects that was used to develop Westlake's share represented the "expenditure to date" cost, which is the actual final capital project cost. Appropriation costs were used for recent improvements that are not final.

calculated for each capital project by applying the useful life to each capital project and multiplying the number of years that the capital project has been in service by the ratio of the capital project cost divided by its useful life. The useful life of the capital projects varies by project type. The useful life of the assets was obtained from CWD's Capital Assets Policies and Procedures document.

Asset accumulated depreciation was used as a proxy for the proportion of the original capital investment to serve Westlake that has been recouped by CWD. This is reasonable since CWD uses a Utility Basis methodology for justifying the differential between the rates charged by the Direct Service Customers and City customers, as described in CWD's March 2011 Comprehensive Financial Plan Report.

Under the Utility Basis calculation, the capital portion of the revenue requirement for Direct Service Customers is determined by (i) depreciation expense, and (ii) return on investment. The depreciation expense portion is the means by which CWD recovers its initial capital investment, and the return on investment provides a means for CWD to recover financing costs (e.g., debt issuance costs and debt interest costs), and to earn a rate of return on the unrecouped investment in the system. Therefore, the accumulated depreciation on assets attributable to Westlake represents the portion of the original capital project cost that has been recovered or recouped by CWD through user charges paid by its Direct Service Customers, and the un-depreciated portion of asset cost represents CWD's stranded capital cost.

In consideration of an appropriate method to calculate the stranded capital costs, it was not possible to directly determine the proportion of cost of each individual capital project incurred to serve Westlake that has been recouped by CWD through payment of user charges because CWD uses a combination of both cash and debt to fund its capital program.³

³ Historically, CWD has funded its CIP with approximately 20 to 30 percent cash and 70 to 80 percent debt (City of Cleveland, Ohio, Division of Water, Feasibility Report for Series 2012 Water Revenue Bonds, September 2012).

Method Used to Calculate Stranded Operating Cost

1. CWD's historical and projected operating costs were obtained and categorized into departmental categories (e.g., customer account services, plant operations, budget & finance, information technology, distribution & maintenance, and engineering) and expense type (e.g., salaries and wages, utilities, materials & supplies, etc.).
2. Historical and projected operating costs were identified as either variable or fixed, and the amounts of variable and fixed operation costs were calculated. Variable costs are defined as costs that are anticipated to be eliminated or significantly reduced when Westlake separates from the CWD system. Fixed costs are defined as costs that are anticipated to remain following Westlake's separation from the CWD system.
3. CWD's fixed operating costs were proportioned to the Low and First High districts based on the allocations developed and contained in CWD's March 2011 Comprehensive Financial Plan Report.
4. Fixed costs that were proportioned to the Low and First High Service Districts were allocated to Westlake based on Westlake's proportion of billed consumption in these districts.
5. The amount of fixed operating costs allocated to Westlake was calculated in each year from FY2018 through FY2033. This 16-year period covers the operating costs for the average remaining depreciable life of the assets used to serve Westlake.⁴ Fixed operating costs were projected to increase at a rate of approximately 2.5 percent per year, and Westlake's proportion of billed consumption in comparison to the total billed consumption within the system was assumed to remain the same as projected for 2015 in CWD's March 2011 Comprehensive Financial Plan Report.
6. The stranded operating cost opinion was determined by calculating the present value of the annual fixed operating costs allocated to Westlake over the 16-year period beginning in FY2018, which is five years after the date that Westlake notified CWD of its intent to separate from the CWD system.

⁴ Note that the 16-year period selected to calculate the stranded fixed operating costs results in a conservatively low value because CWD operates many of its assets beyond their depreciable lives, and as such, CWD will likely continue to incur costs associated with operating water system facilities that were upsized to serve Westlake beyond the 16 year period. Furthermore, other fixed operating costs (e.g., administrative, management, engineering, information technology, budget and finance) are likely to be perpetual costs that will continue beyond the 16-year period.

The present value of projected Westlake fixed costs was calculated using a nominal discount factor of 2.5 percent. The nominal discount factor that was used was obtained from the Office of Management & Budget Circular A-94, and represents an extrapolated nominal interest rate on Treasury Notes and Bonds between 10-year and 20-year maturities. This discount factor reflects the time value of money, and represents the interest rate that CWD could potentially earn if it were to receive payment for stranded operating costs as an upfront payment and invest the funds until needed to pay for stranded costs over time.⁵ The present value costs were calculated in FY2013 dollars.

Stranded Capital Cost Opinion

Tables 2 through 5 present the calculation of CWD's stranded capital cost. Table 2 summarizes the data used to allocate capital costs to Westlake.

Table 2:
Water System Statistics Used to Allocate Capital Costs to Westlake

Description	Distribution Pipe Length (Miles)	Distribution Pipe Length (Inch-Miles)	Water Consumption (MCF) ¹
Entire Distribution System	4,737.56	3,492.04	6,175,459
Western Suburbs	1,819.20	1,391.75	1,972,572
West Section	3,087.04	2,236.09	2,645,069
Westlake	147.26	116.91	170,590

MCF = 1,000 cubic feet

Table 3 calculates the proportion of miles of pipelines, inch-miles of pipeline, and consumption attributable to Westlake. These percentages are used to allocate capital costs to Westlake for each of the three methods. As an example of the allocation process, Table 4 illustrates the allocation of capital costs to Westlake based on proportion of consumption.

⁵ Using the nominal interest rate on Treasury notes and bonds for the discount rate is consistent with CWD's investment policy, which states that U.S. Treasury Obligations (bills, notes, or other obligation guaranteed as to principal and interest by the United States) are authorized investment instruments.

Table 3:
Westlake Proportional Allocation by Method

Description	By Distribution Pipe Length (Miles)	By Distribution Pipe Length (Inch-Miles)	By Water Consumption
Entire Distribution System	3.11%	3.35%	2.76%
Western Suburbs	8.09%	8.40%	8.65%
West Section	4.77%	5.23%	6.45%

Table 4:
Example Allocation of Capital Costs to Westlake by Water Consumption

Description	Total Capital Cost	Westlake Share of Capital Cost (%)	Westlake Share of Capital Cost (\$)
Total Capital Program (1981-2013)	\$1,822,964,593		
Allocated by Location			
Entire Distribution System	\$511,586,917	2.76%	\$14,132,004
Western Suburbs	201,088,708	8.65%	17,390,353
West Section	308,170,079	6.45%	19,874,998
Other	802,118,888		0
Total Allocated to Westlake ¹			\$51,397,355

¹Based on proportion of consumption.

Table 5 presents the calculation of stranded capital costs based on the three allocation methods discussed previously. Detailed stranded capital cost computations are provided in Appendix B. Each of the allocation methods was applied to CWD's historical capital costs to calculate Westlake's share. The computation was based on expenditures to date, useful life, asset age as of 2018, accumulated depreciation as of 2018, and the original cost less depreciation of stranded capital costs.

Table 5:
Summary of Stranded Capital Costs

Allocation Method	Original Cost	Original Cost Less Depreciation	Replacement Cost New	Replacement Cost New Less Depreciation
Consumption	\$51,397,000	\$19,815,000	\$86,622,000	\$30,539,000
Network Inch-Miles	50,131,000	19,558,000	84,424,000	30,374,000
Network Miles	46,880,000	18,261,000	79,072,000	28,445,000
Average Value	\$49,470,000	\$19,211,000	\$83,373,000	\$29,786,000

An alternative method of estimating the stranded capital costs is to use the replacement cost new less depreciation ("RCNLD") amount, calculated as shown in Table 5. Stranded costs were also calculated under this method by indexing Westlake's share of original capital costs to present value using the ENR Construction Cost Index and then subtracting the indexed accumulated depreciation from escalated original costs. Calculating CWD's stranded capital cost using the RCNLD value considers CWD's asset carrying cost. This method results in a much higher value of stranded capital costs. However, for the purposes of this report and for the sake of conservativeness, the lower value of stranded capital costs (using the original cost less depreciation) was used.

Stranded Operating Cost Opinion

The calculation of CWD's stranded operating cost is summarized as follows. Projections of CWD's operating costs and Westlake's water consumption through 2033 were developed. Table 6 presents CWD's operating costs for the five-year period 2018 through 2022. The full stranded operating cost analysis covers the period of 2018 through 2033, and is provided in Appendix C.

Table 6:
Projected CWD Operating Costs by Section

Section	2018	2019	2020	2021	2022
Customer Account Services	\$18,902,000	\$19,347,000	\$19,802,000	\$20,269,000	\$20,746,000
Plant Operations	54,037,000	56,393,000	58,863,000	61,453,000	64,169,000
Budget and Finance	2,782,000	2,847,000	2,915,000	2,984,000	3,055,000
Information Technology	13,590,000	13,980,000	14,383,000	14,799,000	15,229,000
Distribution and Maintenance	43,616,000	44,698,000	45,810,000	46,951,000	48,124,000
Admin/Water Management	25,130,000	25,772,000	26,431,000	27,109,000	27,806,000
Engineering	17,603,000	18,060,000	18,530,000	19,014,000	19,511,000
Total	\$175,660,000	\$181,097,000	\$186,734,000	\$192,579,000	\$198,640,000

¹Projected based on 2011 and 2012 actual expenses from CWD and 2013-2015 projections from CWD's Comprehensive Financial Plan Report, dated March 2011.

Next, variable costs associated with personnel, utilities, materials, and supplies were subtracted from the total operating costs from each Section category. Variable costs were identified based on a review of CWD's operating costs by Section and budget category, and discussions with, and input from CWD staff. Cost categories containing variable costs include salaries and wages, employee benefits, utilities, materials and supplies, maintenance, and claims, refunds and miscellaneous. The identification of variable costs associated with each Section is summarized below.

Customer Account Services: This Section is responsible for customer service, meter reading, billing, and collections. The variable costs associated with this Section include costs for employees in the call center, billing, and meter reading functions. These employees comprise approximately 72 percent of the total Section employees. The remaining salaries and wages and employee benefits for this Section are considered fixed.

Plant Operations: This Section is responsible for water supply, treatment, laboratory testing, and pumping of raw and treated water. The variable costs associated with this Section consist of water pumping and materials and supplies costs. Approximately 85 percent of utility costs in total are related to electricity expenses for pumping. In this Section, 100 percent of the utility costs are considered variable. Other variable costs in this Section include 100 percent of materials and supplies expenses.

Budget and Finance: This Section is responsible for administering the operating budget, contracts, legislation, requisitions, and capital financing decisions. No variable costs were identified for this Section.

Information Technology: This Section is responsible for administering and maintaining computer networks, the billing system, work order system, and communications systems. No variable costs were identified for this Section.

Distribution and Maintenance: This Section is responsible for maintaining the water transmission and distribution system and making service calls to water customers. The variable costs associated with this Section consist of salaries, wages, and benefits for those crews that would no longer be needed to serve Westlake following Westlake's separation, plus materials and supplies associated with distribution maintenance in Westlake that would no longer be needed. Variable costs were calculated based on the proportion of miles of waterlines in Westlake as compared to the entire system, or 3.1 percent.⁶

Administration/Water Management: This Section is responsible for general administration and oversight, including human resources, public relations, and training. The variable costs associated with this Section include 100 percent of the claims, refunds, and miscellaneous expenses of this Section.

Engineering: This Section is responsible for capital improvement projects and program management. The variable costs associated with this Section include expenditures for maintenance activities that would no longer be needed to be performed on the Westlake portion of the system. As this Section's activities include repairs to water lines and other distribution system appurtenances, variable costs were calculated based on the proportion of miles of water lines in Westlake as compared to the total system, or 3.1 percent.

⁶ This proportion is supported by CWD maintenance records for 2012, which indicate that approximately 2 percent of total main repairs, 3 percent of the total valve repairs, and 2 percent of the total repairs in the distribution system were performed in Westlake.

Table 7 presents CWD's net fixed operating costs, which are net of the variable costs described above.

Table 7:
Projected CWD Fixed Operating Costs by Section

Section	2018	2019	2020	2021	2022
Customer Account Services	\$9,258,000	\$9,488,000	\$9,725,000	\$9,967,000	\$10,216,000
Plant Operations	16,863,000	17,247,000	17,641,000	18,043,000	18,455,000
Budget and Finance	2,782,000	2,847,000	2,915,000	2,984,000	3,055,000
Information Technology	13,590,000	13,980,000	14,383,000	14,799,000	15,229,000
Distribution and Maintenance	42,489,000	43,544,000	44,627,000	45,740,000	46,884,000
Admin/Water Management	21,480,000	22,026,000	22,587,000	23,163,000	23,756,000
Engineering	17,328,000	17,778,000	18,241,000	18,716,000	19,206,000
Total	\$123,790,000	\$126,910,000	\$130,119,000	\$133,412,000	\$136,801,000

¹Projected based on 2011 and 2012 actual expenses from CWD and 2013 – 2015 projections from March 2011 Comprehensive Financial Plan Report, net of identified variable costs by category and Section.

The projected fixed operation costs were then allocated to the Low and First High Service Districts of the system. The allocation factors contained in CWD's March 2011 Comprehensive Financial Plan Report were used for the allocation. These allocation percentages are summarized in Table 8. Table 9 shows the resulting allocation of fixed operating costs attributable to the Low and First High Service Districts by applying the allocation percentages shown in Table 8 to the fixed operating costs shown in Table 7.

Table 8:
Allocation of CWD Operating Costs to Low/First High Service Areas

Section	2018	2019	2020	2021	2022
Customer Account Services	19.5%	19.5%	19.5%	19.5%	19.5%
Plant Operations	19.5%	19.5%	19.5%	19.5%	19.5%
Budget and Finance	19.5%	19.5%	19.5%	19.5%	19.5%
Information Technology	19.5%	19.5%	19.5%	19.5%	19.5%
Distribution and Maintenance	19.1%	19.1%	19.1%	19.1%	19.1%
Admin/Water Management	23.0%	23.0%	23.0%	23.0%	23.0%
Engineering	19.4%	19.4%	19.4%	19.4%	19.4%

¹Based on allocations to service areas from March 2011 Comprehensive Financial Plan Report

Table 9:
Projected CWD Fixed Operating Costs Allocated to Low/First High Service Areas

Section	2018	2019	2020	2021	2022
Customer Account Services	\$1,804,000	\$1,849,000	\$1,895,000	\$1,943,000	\$1,991,000
Plant Operations	3,293,000	3,368,000	3,445,000	3,524,000	3,604,000
Budget and Finance	542,000	555,000	568,000	582,000	595,000
Information Technology	2,649,000	2,725,000	2,803,000	2,884,000	2,968,000
Distribution and Maintenance	8,115,000	8,317,000	8,524,000	8,736,000	8,955,000
Admin/Water Management	4,940,000	5,066,000	5,195,000	5,328,000	5,464,000
Engineering	3,363,000	3,451,000	3,540,000	3,633,000	3,728,000
Total	\$24,706,000	\$25,331,000	\$25,970,000	\$26,630,000	\$27,305,000

The fixed operating costs attributable to the Low and First High Service Districts were then allocated to Westlake based on proportion of billed consumption. Table 10 presents the projected consumption for Westlake as a proportion of total projected Low/First High demand.

Table 10:
Westlake Proportion of Total Projected Billed Consumption by Pressure Zone

Customer	2018	2019	2020	2021	2022
Direct Service Suburbs					
Low	1,302,394	1,270,448	1,239,286	1,208,889	1,179,237
1st High	1,377,532	1,343,743	1,310,784	1,278,632	1,247,270
2nd High	0	0	0	0	0
3rd High	0	0	0	0	0
Total Consumption by Zone	2,679,925	2,614,191	2,550,070	2,487,521	2,426,507
Westlake Consumption					
Low	38,744	37,794	36,867	35,963	35,081
1st High	99,629	97,185	94,801	92,476	90,208
2nd High	0	0	0	0	0
3rd High	0	0	0	0	0
Total	138,373	134,979	131,669	128,439	125,289
Westlake Proportion of Total Low Demand	2.97%	2.97%	2.97%	2.97%	2.97%
Westlake Proportion of Total First High Demand	7.23%	7.23%	7.23%	7.23%	7.23%

¹Projected based on 2011 and 2012 actuals from CWD and 2013 - 2015 projections from March 2011 Comprehensive Financial Plan Report.

²Consumption shown in 1,000 cubic feet.

Table 11 presents the fixed costs allocated to Westlake based on allocated Low and First High Service District costs and Westlake's proportion of Low and First High

demands. CWD's stranded operating cost was calculated by calculating the present value in FY2013 dollars of 16 years of stranded operating costs (beginning in 2018) at a discount rate of 2.5 percent.

Table 11:
Calculated Stranded Operating Costs - Westlake

Description	2018	2019	2020	2021	2022
CWD Fixed Cost Allocated to Low	\$7,863,000	\$8,061,000	\$8,265,000	\$8,474,000	\$8,689,000
Westlake Share (%)	2.97%	2.97%	2.97%	2.97%	2.97%
Westlake Share (\$)	\$234,000	\$240,000	\$246,000	\$252,000	\$258,000
CWD Fixed Cost Allocated to 1 st High	\$16,845,000	\$17,270,000	\$17,707,000	\$18,155,000	\$18,616,000
Westlake Share (%)	7.23%	7.23%	7.23%	7.23%	7.23%
Westlake Share (\$)	\$1,218,000	\$1,249,000	\$1,281,000	\$1,313,000	\$1,346,000
Total Westlake Share	\$1,452,000	\$1,489,000	\$1,527,000	\$1,565,000	\$1,604,000
Present Value ^{1,2}	\$20,612,000				

¹ Discount rate of 2.5% based on the nominal interest rates on Treasury Notes and Bonds between 10 and 20-year maturities; Office of Management and Budget, Circular A-94 Appendix C, December 2012.

² Includes annual Stranded Operating Costs for the years 2018 through 2033. Present value shown in 2013 dollars. The annual fixed costs for years 2023 through 2033 are presented in Appendix C.

Total Stranded Costs

The total stranded costs were calculated as the sum of the stranded capital costs and the stranded operating costs, and are summarized below.

Table 12:
Opinion of CWD Stranded Costs

Description	Amount
Stranded CWD Capital Costs	\$19,211,000
Stranded CWD Operating Costs	\$20,612,000
Total Calculated CWD Stranded Costs	\$39,823,000

Section 5 – Westlake Fixed Fee Computation

A computation of the user charge impact to Westlake customers was prepared if the Costs to Cure and Stranded Cost amounts were recovered from Westlake over (1) a one-year period, and (2) over a five-year period. For this illustration, it was assumed that the Costs to Cure and Stranded Costs would be recovered by incrementally raising the fixed fee component of Westlake user charges. Table 13 presents these computations and summarizes the incremental quarterly fixed fee amount on a per equivalent meter unit (EMU) basis that would be needed. One EMU is equivalent to a customer with a 5/8", 3/4", or 1" water meter. The quarterly fixed fee is calculated by dividing the total costs to be recovered in each quarter by the total number of EMUs served in Westlake. Total EMUs were determined by multiplying the number of accounts by meter size in Westlake by the equivalent meter ratios used by CWD to assess fixed fees in 2013. Quarterly fixed fees by meter size were determined by multiplying the quarterly fixed fee for one EMU by the equivalent meter ratio as presented in Table 13.

Table 13:
Total Cost to Cure and Stranded Costs with Fixed Fee Calculation

Description		Amount
Costs to Cure		\$19,050,400
Stranded Costs		\$39,823,000
Total Costs		\$58,873,400
Westlake Equivalent Meter Units (EMU)		11,887
Quarterly Fixed Fee per EMU (Recovery over 1 year)		\$1,238
Quarterly Fixed Fee per EMU (Recovery over 5 years)¹		\$291
Quarterly Fixed Fee by Meter Size (Recovery over 5 years)	Equivalent Ratio	
1" or smaller meters (Residential)	1.000	\$291
2" and 1-1/2" meters (Commercial)	1.952	\$569
3" and 4" meters (Commercial)	6.667	\$1,942
6" meters (Commercial)	11.905	\$3,468
8" meters (Commercial)	18.095	\$5,272

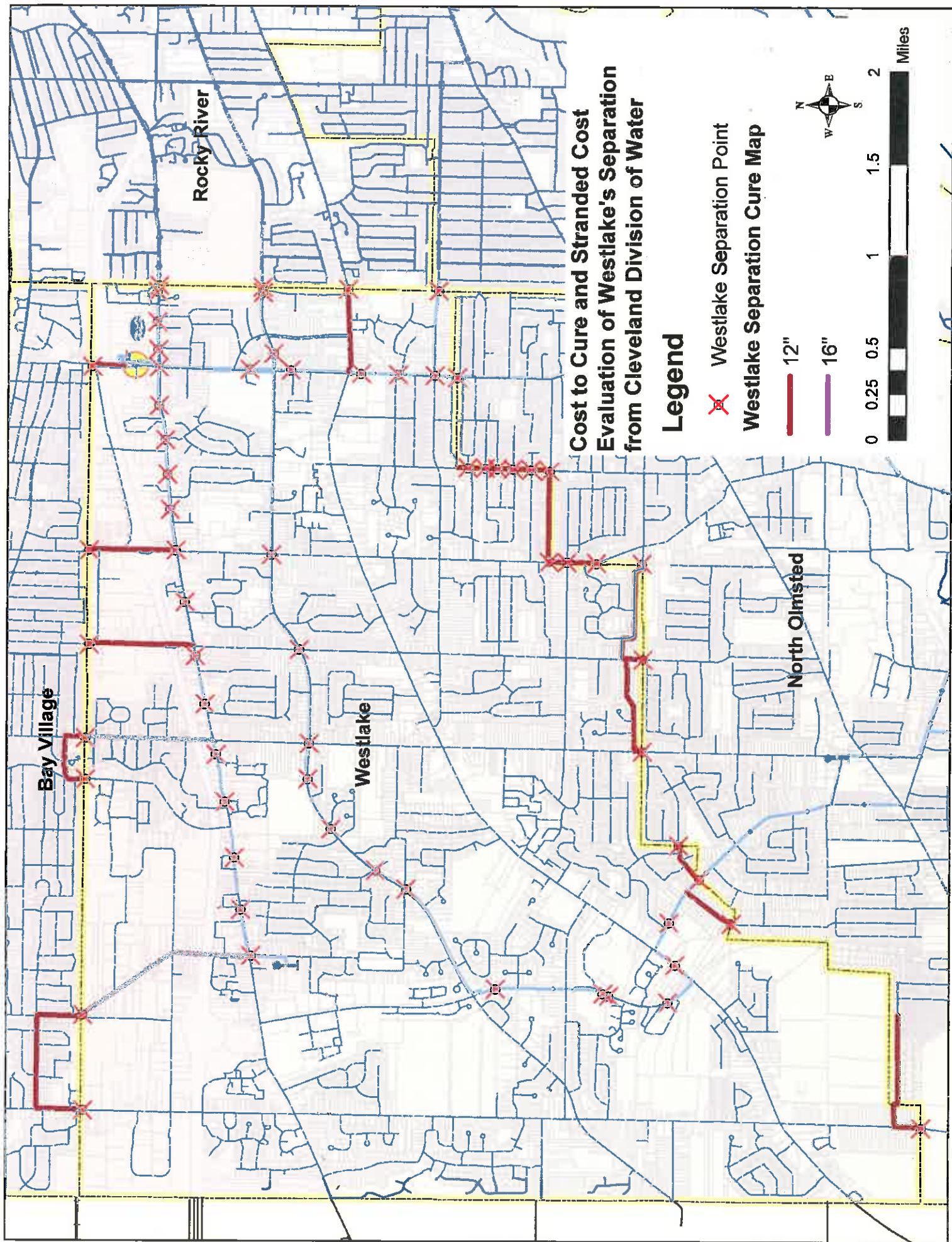
¹Based on 17 quarterly billing periods over the five years.

Section 6 - Conclusions and Findings

The Costs to Cure and Stranded Costs associated with the separation of Westlake from the CWD's system was determined to be approximately \$59 million. If these costs were recovered from Westlake customers over a five-year period (17 quarterly payments), the quarterly fixed fee for a residential customer with a 1-inch diameter or smaller meter would increase by approximately \$291 per quarter. Furthermore, if these costs are not collected from Westlake customers, in order for CWD to maintain the current level of service, these costs would need to be recovered from CWD's remaining customers, resulting in an incremental increase in the remaining customers' water bills.

Appendix A

Costs to Cure Map



Appendix B

Stranded Capital Cost Calculation
Details

Capital Projects Listing 1981-2013

Table 1 – Summary of Valuation

*Table 2 – Consumption-Based
Valuation*

*Table 3 – Network Inch-Miles Based
Valuation*

*Table 4 – Network Miles-Based
Valuation*

Table 5 – Asset Useful Lives

Capital Projects Listing - Westlake Allocation by Miles

Total Allocation to Westlake	\$46,880,111
Total Capital Program	\$1,939,103,586

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1981	085001	Direct Acquisition	341,863	341,863	6	Undetermined/Unqualified	0.00%	\$0
1981	085002	Consult Pulling Machine	21,598	21,598	6	Undetermined/Unqualified	0.00%	\$0
1981	085003	Meters	3,917,621	3,917,621	5	Entire System	3.11%	\$121,773
1981	085005	Drafting Equipment	480	480	6	Undetermined/Unqualified	0.00%	\$0
1981	085006	Main Broadview Spring to Broadview	541,157	541,157	1	Cleveland Only	0.00%	\$0
1981	085007	RT 290 Sec) 27 Relocation	757	757	6	Undetermined/Unqualified	0.00%	\$0
1981	085008	Broadview & N Schaff-Engineer	1,226	1,226	1	Undetermined/Unqualified	0.00%	\$0
1981	085009	Recirculation-sludge system	594	594	6	Undetermined/Unqualified	0.00%	\$0
1981	085011	Solon water tower	138	138	3	Eastern Suburbs	0.00%	\$0
1982	085012	Replace Filters Nottingham	235,493	235,493	3	Eastern Suburbs	0.00%	\$0
1982	085014	Trunk Main Ridge Rd.	753,685	753,685	2	Western Suburbs	8.09%	\$61,009
1982	085015	New 1 20 mg Reservoir Warrens	4,070,150	4,070,150	3	Eastern Suburbs	0.00%	\$0
1982	085016	Replace old 1915 elevator	46	46	6	Undetermined/Unqualified	0.00%	\$0
1982	085018	Trunk Main 24" East 71-74 HA	41,407	41,407	11	Eastern City and Suburbs	0.00%	\$0
1982	085019	Increase First High Service	173,000	173,000	5	Entire System	3.11%	\$5,377
1982	085020	Automation - Instruments Engineering	325	325	6	Undetermined/Unqualified	0.00%	\$0
1982	085021	Replace sections of roofing	80,350	80,350	6	Undetermined/Unqualified	0.00%	\$0
1982	085022	Study for discharge piping	3,258	3,258	6	Undetermined/Unqualified	0.00%	\$0
1982	085023	Engineer ETC for Expansion Engle	2,220,210	2,220,210	8	2nd High, PV, and Pearl	0.00%	\$0
1982	085024	Engineer ETC for Expansion Pearl	257,325	257,325	4	Pearl Only	0.00%	\$0
1982	085025	Replace sump pump Nottingham	96	96	3	Eastern Suburbs	0.00%	\$0
1982	085026	Expansion Pleasant Valley Reservoir	155,658	155,658	8	2nd High, PV, and Pearl	0.00%	\$0
1982	085028	Study Improvements-Baldwin	2,667,203	2,667,203	11	Eastern City and Suburbs	0.00%	\$0
1983	085029	Install alarm system	46	46	6	Undetermined/Unqualified	0.00%	\$0
1983	085031	Pearl Rd Main Boston RD Sec B	1,624,301	1,624,301	4	Pearl Only	0.00%	\$0
1983	085032	Bagley & Whitney Main	1,425,022	1,425,022	8	2nd High, PV, and Pearl	0.00%	\$0
1983	085033	Backup pump at Independence	3,985	3,985	8	2nd High, PV, and Pearl	0.00%	\$0
1983	085034	Backup pump at Cedar-Winch	8,899	8,899	3	Eastern Suburbs	0.00%	\$0
1983	085035	Backup pump at Pleasant Valley	642,403	642,403	7	2nd and PV	0.00%	\$0
1983	085036	1480 (1039) Cleveland & Brooklyn	269	269	1	Cleveland Only	0.00%	\$0
1983	085037	3000 Gallon Tower Blossom	1,956,685	1,956,685	7	2nd and PV	0.00%	\$0
1983	085038	1st High Booster pump at Can	750	750	6	Undetermined/Unqualified	0.00%	\$0
1983	085039	Restricted Main Webster Road	1,092	1,092	6	Undetermined/Unqualified	0.00%	\$0
1983	085040	Expand Crown Filter	22,736	22,736	2	Western Suburbs	8.09%	\$1,840
1983	085041	CUY CR City Lee Rd. in Shaker	2,503	2,503	3	Eastern Suburbs	0.00%	\$0
1983	085042	CUY City Warrensville Ctr. Rd.	2,227	2,227	3	Eastern Suburbs	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1983	085043	CUY City Pearl Rd. Strongsville	1,161	1,161	4	Pearl Only	0.00%	\$0
1983	085044	CUY City Harvard Rd. Moreland	47	47	3	Eastern Suburbs	0.00%	\$0
1983	085045	Force A/C SB 303-691 Center	20	20	6	Undetermined/Unqualified	0.00%	\$0
1983	085046	Division Filter Study - Stru	88,711	88,711	10	Western City and Suburbs	4.77%	\$4,232
1983	085047	Rehab Sub Electric Facilities	60	60	6	Undetermined/Unqualified	0.00%	\$0
1984	085048	Cleaning & Relining Program	1,798,297	1,798,297	5	Entire System	3.11%	\$55,897
1984	085049	Pitometer Survey of Distribution	491,693	491,693	5	Entire System	3.11%	\$15,284
1984	085050	Install Roms	1,473,104	1,473,104	6	Undetermined/Unqualified	0.00%	\$0
1984	085051	Strongsville Maintenance Yards Construction	186,863	186,863	8	2nd High, PV, and Pearl	0.00%	\$0
1984	085052	2 Yr Study Plan Etc Cud	100,967	100,967	6	Undetermined/Unqualified	0.00%	\$0
1984	085053	8" Main in Hudson Ave E 105	462	462	1	Cleveland Only	0.00%	\$0
1984	085054	ODOT Force Account 1480	604,640	604,640	5	Entire System	3.11%	\$18,794
1984	085055	Fencing & Landscaping Baldwin	92,955	92,955	11	Eastern City and Suburbs	0.00%	\$0
1984	085056	Shoring & Retaining Baldwin	170,892	170,892	3	Eastern Suburbs	0.00%	\$0
1984	085057	Fencing & Security Nottingham	12,093	12,093	3	Eastern Suburbs	0.00%	\$0
1984	085058	Cleaning & Relining Mains by CWD	2,210	2,210	6	Undetermined/Unqualified	0.00%	\$0
1984	085059	Electrical Appurtenances & Var	490	490	6	Undetermined/Unqualified	0.00%	\$0
1984	085060	Cleaning & Relining Mains	1,364,375	1,364,375	5	Entire System	3.11%	\$42,410
1984	085061	Main Burke Ave at E78th	100,907	100,907	1	Cleveland Only	0.00%	\$0
1984	085062	Main E78th from Burke Ave to Ma	44,677	44,677	1	Cleveland Only	0.00%	\$0
1984	085063	Replace 40 Hydrant Valves WI	296,579	296,579	7	2nd and PV	0.00%	\$0
1984	085064	Preliminary Eng Division set	400	400	6	Undetermined/Unqualified	0.00%	\$0
1984	085065	Completely Remove Warrensville	211	211	3	Eastern Suburbs	0.00%	\$0
1984	085066	Telemetering Etc #2 Pump Eng	11,134	11,134	6	Undetermined/Unqualified	0.00%	\$0
1984	085067	Install valves at Cedar Winchester	683	683	3	Eastern Suburbs	0.00%	\$0
1984	085068	City via ODOT county Force	34	34	6	Undetermined/Unqualified	0.00%	\$0
1984	085069	Main-Cleveland Industrial	376	376	1	Cleveland Only	0.00%	\$0
1984	085070	Misc Maintenance Service	18	18	6	Undetermined/Unqualified	0.00%	\$0
1985	085071	Renovation of Wastewater - D	5,554	5,554	6	Undetermined/Unqualified	0.00%	\$0
1985	085072	Replace Roofing System at Facility	162,653	162,653	6	Undetermined/Unqualified	0.00%	\$0
1985	085073	Restore Backwash Water Reservoir	6,855	6,855	6	Undetermined/Unqualified	0.00%	\$0
1985	085074	Site Purchase Highland-Brecksville	55	55	7	2nd and PV	0.00%	\$0
1985	085075	Waterwork-Pearl Rd	292	292	8	2nd High, PV, and Pearl	0.00%	\$0
1985	085076	Clean & Relining Water mains	2,037,884	2,037,884	5	Entire System	3.11%	\$63,345
1985	085077	Replace Valves at Nottingham	96,781	96,781	3	Eastern Suburbs	0.00%	\$0
1985	085078	Replace Butterfly Valves at Nottingham	479	479	3	Eastern Suburbs	0.00%	\$0
1985	085079	Replace Chlorinator - Nottingham	232	232	3	Eastern Suburbs	0.00%	\$0
1985	085080	ODOT Richmond Rd RT 175	357	357	3	Eastern Suburbs	0.00%	\$0
1985	085081	Clean & Relining Water mains	36,483	36,483	5	Entire System	3.11%	\$1,134
1985	085082	Euclid Creek Flood Control	38	38	3	Eastern Suburbs	0.00%	\$0
1985	085083	Crown Intake Restoration	1,642,811	1,642,811	2	Western Suburbs	8.09%	\$132,982

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1985	085084	Clean & Relining Supply Mains	2,272,543	2,272,543	5	Entire System	3.11%	\$70,639
1985	085085	Computerized Drafting system	225,791	225,791	6	Undetermined/Unqualified	0.00%	\$0
1985	085086	Computer Record System	90,100	90,100	6	Undetermined/Unqualified	0.00%	\$0
1985	085087	Install Telemetering -Seven Hills	46	46	6	Undetermined/Unqualified	0.00%	\$0
1985	085088	Rehab Driveway at DPU Building	152,136	152,136	1	Cleveland Only	0.00%	\$0
1985	085089	Maintenance work at Baldwin	83,490	83,490	11	Eastern City and Suburbs	0.00%	\$0
1985	085090	Replace Roof-Radio Repair	39,990	39,990	5	Entire System	3.11%	\$1,243
1985	085091	Clean & reline 85K Ft Mains	3,115,850	3,115,850	5	Entire System	3.11%	\$96,852
1985	085093	Electrification at Division	67	67	6	Undetermined/Unqualified	0.00%	\$0
1985	085094	Electrification at Division	27,654	27,654	10	Western City and Suburbs	4.77%	\$1,319
1985	085096	New Filtration Facilities	25,999	25,999	6	Undetermined/Unqualified	0.00%	\$0
1985	085097	Miscellaneous	510,266	510,266	6	Undetermined/Unqualified	0.00%	\$0
1985	085098	Consulting	122,953	122,953	6	Undetermined/Unqualified	0.00%	\$0
1985	085099	Water Main E9th	465,983	465,983	1	Cleveland Only	0.00%	\$0
1985	085100	Crown Intake Diving	157,970	157,970	2	Western Suburbs	8.09%	\$12,787
1985	085101	Clean & Line Mains 1985	2,376,236	2,376,236	5	Entire System	3.11%	\$73,862
1986	086001	Baldwin Sludge Rehabilitation	12,819,417	12,819,417	3	Eastern Suburbs	0.00%	\$0
1986	086010	Division Rehabilitation	104,180,086	104,180,086	10	Western City and Suburbs	4.77%	\$4,969,667
1986	086011	Division Rehabilitation/Professional services	10,809,067	10,809,067	10	Western City and Suburbs	4.77%	\$515,621
1986	086030	Nottingham 2nd high rehab	2,804	2,804	3	Eastern Suburbs	0.00%	\$0
1986	086035	Water Main, State-Brecksville	3,323,986	3,323,986	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086040	Water Mains, various	121,425	121,425	1	Cleveland Only	0.00%	\$0
1986	086045	Crown sludge Rehab	7,682,507	7,682,507	2	Western Suburbs	8.09%	\$621,881
1986	086050	Nottingham sludge rehab	7,143,472	7,143,472	3	Eastern Suburbs	0.00%	\$0
1986	086055	Independence Addition	253,433	253,433	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086060	Cedar-Winchester Rehab	258,481	258,481	3	Eastern Suburbs	0.00%	\$0
1986	086070	Water main, W65th-Detroit Ave	5,339	5,339	1	Cleveland Only	0.00%	\$0
1986	086075	Crown Masonry Rehab	248,558	248,558	2	Western Suburbs	8.09%	\$20,120
1986	086080	Nottingham Land Improvements	4,938	4,938	3	Eastern Suburbs	0.00%	\$0
1986	086085	Shepard Station Improvements	303,588	303,588	3	Eastern Suburbs	0.00%	\$0
1986	086095	Pitometer services	288,171	288,171	5	Entire System	3.11%	\$8,957
1986	086100	Kirtland Parking Garage	86,553	86,553	6	Undetermined/Unqualified	0.00%	\$0
1986	086105	Water Main, Highland-Richmond	360,396	360,396	3	Eastern Suburbs	0.00%	\$0
1986	086110	Pama Control SCADA System	1,340,333	1,340,333	5	Entire System	3.11%	\$41,662
1986	086120	Water Main, Brecksville Rd	534	534	7	2nd and PV	0.00%	\$0
1986	086125	Clean & Relining Mains 1985	3,712	3,712	6	Undetermined/Unqualified	0.00%	\$0
1986	086130	Water Main, W6th-Lakeside Ave	295,655	295,655	1	Cleveland Only	0.00%	\$0
1986	086135	Water Main, W10th-St.Clair Ave	24,261	24,261	1	Cleveland Only	0.00%	\$0
1986	086349	Nottingham, Filter Rehab	1,752	1,752	3	Eastern Suburbs	0.00%	\$0
1986	086382	Warrens Reservoir	18	18	3	Eastern Suburbs	0.00%	\$0
1986	086398	Broadway Booster Station	2,796,417	2,796,417	3	Eastern Suburbs	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1986	086454	Engle Rd Expansion	1,392	1,392	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086465	Nottingham Capacity Expansion	1,119,227	1,119,227	3	Eastern Suburbs	0.00%	\$0
1986	086474	Division Phase 1 w/Bohen Assoc	0	0	6	Undetermined/Unqualified	0.00%	\$0
1986	086486	Water Main, Bagley Whitney	13,557	13,557	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086492	Water Main, Fulton- Denison	51,202	51,202	2	Western Suburbs	8.09%	\$4,145
1986	086493	Water Main, Fulton-Brecksville	48,150	48,150	2	Western Suburbs	8.09%	\$3,898
1986	086538	Baldwin Scrubber System	655,593	655,593	11	Eastern City and Suburbs	0.00%	\$0
1986	086545	Shepard Road Reservoir Main	18,514	18,514	3	Eastern Suburbs	0.00%	\$0
1986	086546	Private Main Insulation's	146	146	1	Cleveland Only	0.00%	\$0
1986	086547	Contractor Installing Rom's	20,120	20,120	6	Undetermined/Unqualified	0.00%	\$0
1986	086550	Shepard Road Pump/Gen Rehab	15,852	15,852	3	Eastern Suburbs	0.00%	\$0
1986	086551	Engineering Study	3,118	3,118	6	Undetermined/Unqualified	0.00%	\$0
1986	086581	Water Main Detroit-Shoreway	612	612	1	Cleveland Only	0.00%	\$0
1986	086583	Baldwin Heating System Rehab	413,259	413,259	11	Eastern City and Suburbs	0.00%	\$0
1986	086611	Independence Rehab Pum	0	0	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086613	Crown Intake Restoration	22,739	22,739	2	Western Suburbs	8.09%	\$1,841
1986	086615	Nottingham Restore NW System	182,159	182,159	3	Eastern Suburbs	0.00%	\$0
1986	086616	Crown, Restore WW System	134,525	134,525	2	Western Suburbs	8.09%	\$10,889
1986	086617	Computerized Drafting System	11,495	11,495	6	Undetermined/Unqualified	0.00%	\$0
1986	086619	Convert High Pressure System	2,767	2,767	6	Undetermined/Unqualified	0.00%	\$0
1986	086620	Water Main, Woodhill Road	595,383	595,383	11	Eastern City and Suburbs	0.00%	\$0
1986	086629	DPU Building	20,235	20,235	5	Entire System	3.11%	\$629
1986	086631	Water Main, Old River	60,040	60,040	1	Cleveland Only	0.00%	\$0
1986	086638	Relocate 250 of 30 Main E 7	1,277	1,277	1	Cleveland Only	0.00%	\$0
1986	086640	Water Main, Various Culverts	98,840	98,840	6	Undetermined/Unqualified	0.00%	\$0
1986	086642	Crown-Sprague Main Part 2	3,653,992	3,653,992	2	Western Suburbs	8.09%	\$295,782
1986	086645	Water Main, E 88	44,953	44,953	1	Cleveland Only	0.00%	\$0
1986	086646	Replace Tap Sleeve & DIV	4,353	4,353	6	Undetermined/Unqualified	0.00%	\$0
1986	086647	Water Main, Solon- Chagrin	1,273,786	1,273,786	3	Eastern Suburbs	0.00%	\$0
1986	086648	Water Mains, Var 8" & 12 "	1,095,015	1,095,015	1	Cleveland Only	0.00%	\$0
1986	086651	Crown - Sprague Main Part 1	1,705,125	1,705,125	2	Western Suburbs	8.09%	\$138,026
1986	086652	Water Main, Bethel Court	43,646	43,646	1	Cleveland Only	0.00%	\$0
1986	086655	Rehab Bald/Fair Meter System	75,952	75,952	11	Eastern City and Suburbs	0.00%	\$0
1986	086657	DPU Building, Replace Roof	123,664	123,664	5	Entire System	3.11%	\$3,844
1986	086658	Nottingham Interconnect	140,121	140,121	3	Eastern Suburbs	0.00%	\$0
1986	086659	Cleaning & Lining Supply Main	5,894,714	5,894,714	5	Entire System	3.11%	\$183,228
1986	086660	Repair Lorain RD Water Main	145,000	145,000	1	Cleveland Only	0.00%	\$0
1986	086661	Restore Reservoir Tank-Engle	232,250	232,250	2	Western Suburbs	8.09%	\$18,800
1986	086662	Painting Reservoir Tank-Engle	69,680	69,680	2	Western Suburbs	8.09%	\$5,640
1986	086664	Extend & Enclose Door at Pub	11,250	11,250	6	Undetermined/Unqualified	0.00%	\$0
1986	086667	Harborview Drive Water Main	42,574	42,574	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1986	086668	Loading Dock, Fairmount Pump	61,910	61,910	11	Eastern City and Suburbs	0.00%	\$0
1986	086669	Replace Tap Sleeves-Division	277,015	277,015	10	Western City and Suburbs	4.77%	\$13,214
1986	086670	Water Main, Old River Road	275,458	275,458	1	Cleveland Only	0.00%	\$0
1986	086671	Harvard Yard Property Expansion	338,500	338,500	5	Entire System	3.11%	\$10,522
1986	086672	Rehab 60" Raw Water Main	2,593,854	2,593,854	11	Eastern City and Suburbs	0.00%	\$0
1987	087673	Aerial Photo and Surveys	30,086	30,086	5	Entire System	3.11%	\$935
1987	087674	Cleaning and Linig Main	4,258,610	4,258,610	1	Cleveland Only	0.00%	\$0
1987	086675	Replace Crown Flocculators	452,688	452,688	2	Western Suburbs	8.09%	\$36,644
1987	086676	East 80 Main replacement	55,457	55,457	1	Cleveland Only	0.00%	\$0
1987	086677	Richmond Ave Main replacement	96,708	96,708	3	Eastern Suburbs	0.00%	\$0
1987	086678	Parma Pump 4e Rehabilitation	105,785	105,785	8	2nd High, PV, and Pearl	0.00%	\$0
1987	086679	Crown-Sprague Main Part 3	1,842,489	1,842,489	2	Western Suburbs	8.09%	\$149,145
1987	086680	E 71 St Main Replacement	142,875	142,875	1	Cleveland Only	0.00%	\$0
1987	086681	Replace Crown Boilers	298,178	298,178	2	Western Suburbs	8.09%	\$24,137
1987	086682	Crown-Sprague Main Sec 1 4A	1,716,853	1,716,853	2	Western Suburbs	8.09%	\$138,975
1987	086683	Crown-Sprague Main Sec 1 4B	2,264,082	2,264,082	2	Western Suburbs	8.09%	\$183,272
1987	086685	West 130 St Main Replacement	145,247	145,247	1	Cleveland Only	0.00%	\$0
1987	086686	Fulton -Brecksville Supply main Sec1	3,007,297	3,007,297	2	Western Suburbs	8.09%	\$243,434
1987	086687	Fulton -Brecksville Supply main Sec1	2,994,824	2,994,824	2	Western Suburbs	8.09%	\$242,424
1987	086688	Brecksville Water supply Main	1,002,587	1,002,587	7	2nd and PV	0.00%	\$0
1987	086689	Oaks/Bdview/Akins Main Sec 1	1,176,383	1,176,383	7	2nd and PV	0.00%	\$0
1987	086690	Oaks/Bdview/Akins Main Sec 2	1,279,007	1,279,007	7	2nd and PV	0.00%	\$0
1987	086691	Brookpark-Deaning Supply Main	5,381,391	5,381,391	2	Western Suburbs	8.09%	\$435,611
1987	086692	Crown Low Service Supply Main	346,964	346,964	2	Western Suburbs	8.09%	\$28,086
1987	086693	Fulton-Denison-Bkpark Supply Main	4,818,473	4,818,473	2	Western Suburbs	8.09%	\$390,044
1987	086694	1989 Cleaning & Lining	5,432,430	5,432,430	5	Entire System	3.11%	\$168,859
1987	086695	Distribution Main Replacement Program	2,480,613	2,480,613	1	Cleveland Only	0.00%	\$0
1987	086696	Division-Fairmount Boiler Replacement	764,904	764,904	5	Entire System	3.11%	\$23,776
1987	086697	Aerial Photo Mapping Survey	323,474	323,474	5	Entire System	3.11%	\$10,055
1988	088800	New Warrensville Pump Station	1,959,145	1,959,145	3	Eastern Suburbs	0.00%	\$0
1988	088801	East 91 st 12" Main Replacement	26,752	26,752	1	Cleveland Only	0.00%	\$0
1988	088802	Crown Plant Neutralization System	102,073	102,073	2	Western Suburbs	8.09%	\$8,263
1988	088803	Division Dam Board Installation	108,112	108,112	10	Western City and Suburbs	4.77%	\$5,157
1988	088805	Rehabilitation Kiriland Raw Mains II	4,919,327	4,919,327	11	Eastern City and Suburbs	0.00%	\$0
1988	51088806	Harvard Yards - Professional Services	1,928,444	1,928,444	5	Entire System	3.11%	\$59,943
1988	088807	Pump Station Battery Installations	43,022	43,022	6	Undetermined/Unqualified	0.00%	\$0
1988	088808	Cook Rd Water Main	311,402	311,402	7	2nd and PV	0.00%	\$0
1988	088809	S. Marginal Road 12" Main	350,559	350,559	1	Cleveland Only	0.00%	\$0
1988	088810	Nottingham St. 2nd HS Improve	5,816,915	5,816,915	3	Eastern Suburbs	0.00%	\$0
1988	088811	Paving Plant Service Roads	1,993,148	1,993,148	1	Cleveland Only	0.00%	\$0
1988	088812	Meter Bldg at Crown Plant	31,393	31,393	2	Western Suburbs	8.09%	\$2,541

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1988	088813	1989 Cleaning & Relining Program	9,697,620	9,697,620	5	Entire System	3.11%	\$301,436
1988	088815	Install Cathod Protect Sys	245,110	245,110	5	Entire System	3.11%	\$7,619
1988	088816	Replace Valves - Kinsman Tank	366,531	366,531	3	Eastern Suburbs	0.00%	\$0
1988	088817	Interconnect Line - Fairmount	141,943	141,943	3	Eastern Suburbs	0.00%	\$0
1988	088818	Highland / Richmond Sec 2 &	993,970	993,970	3	Eastern Suburbs	0.00%	\$0
1988	088819	Rehab Plans for Filters	6,875,671	6,875,671	3	Eastern Suburbs	0.00%	\$0
1988	088820	Rehab Kirtland Intake Crib	2,314,233	2,314,233	11	Eastern City and Suburbs	0.00%	\$0
1988	51088821	Baldwin Filter Control Valves	936,203	936,203	11	Eastern City and Suburbs	0.00%	\$0
1988	088822	Dist Main Replacement Program II	150,363	150,363	1	Cleveland Only	0.00%	\$0
1989	51089900	Reline Liquid Alum Tanks	198,990	198,990	6	Undetermined/Unqualified	0.00%	\$0
1989	51089901	E. Aurora Rd. 16" Water Main	194,624	194,624	3	Eastern Suburbs	0.00%	\$0
1989	51089902	Remove/Replace PCB Capacitor	288,163	288,163	6	Undetermined/Unqualified	0.00%	\$0
1989	51089903	Parma Control Ctr Renovation	7,432,481	7,432,481	5	Entire System	3.11%	\$231,028
1989	51089904	Harvard Yards - Construction	31,244,542	31,244,542	5	Entire System	3.11%	\$971,190
1989	51089905	Darrow Rd Tower Replacement	2,977,132	2,977,132	3	Eastern Suburbs	0.00%	\$0
1989	51089906	Pettibone Rd 24" Supply Main	188,408	188,408	3	Eastern Suburbs	0.00%	\$0
1989	51089907	Rehab Kirtland Raw Main III	5,207,648	5,207,648	3	Eastern Suburbs	0.00%	\$0
1989	51089908	Repair Twin Conduit at Division	638,443	638,443	10	Western City and Suburbs	4.77%	\$30,455
1989	51089909	Parma Pump Station Expansion-Engineering	530,860	530,860	8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089910	Land Acquis - N Royalton	2,497	2,497	9	PV and Pearl	0.00%	\$0
1989	51089911	Parma Pump Stat Expansion	4,111,345	4,111,345	8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089912	Parma Pearl Express Main	9,628,516	9,628,516	8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	1- Pearl_York Phase I, II, & III design			8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	2- Pearl_York Phase I			8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	3- Pearl_York Phase II			8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	4- Pearl_York Phase III			8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089913	Nottingham Control Valves	2,605	2,605	3	Eastern Suburbs	0.00%	\$0
1989	51089914	Engle Road Pump Station	6,910,202	6,910,202	8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089915	Univ Hosp Main Improvements	674,065	674,065	1	Cleveland Only	0.00%	\$0
1990	51090920	1990 Cleaning & Relining Program	8,166,415	8,166,415	5	Entire System	3.11%	\$253,841
1990	51090921	Cochran Harper Road 2nd & 3rd	3,834,555	3,834,555	3	Eastern Suburbs	0.00%	\$0
1990	51090922	Bennett Road 3rd High Supply	4,413	4,413	4	Pearl Only	0.00%	\$0
1990	51090923	W. Shoreway 42" / 36" Relocation	1,740	1,740	1	Cleveland Only	0.00%	\$0
1990	51090924	Division - Northfield Roof Imp	38,321	38,321	6	Undetermined/Unqualified	0.00%	\$0
1990	51090925	Battery/ Charger System Update	91,632	91,632	6	Undetermined/Unqualified	0.00%	\$0
1990	51090926	Main Station Site Improvements	3,580,412	3,580,412	5	Entire System	3.11%	\$111,292
1990	51090927	Fairmount-Warrens Supply Main	25,189,067	25,189,067	3	Eastern Suburbs	0.00%	\$0
1990	51090928	Aerial Photo / Mapping Project	20,685	20,685	5	Entire System	3.11%	\$643
1990	51090930	Clean & Reline Trunk Mains 9	5,675,529	5,675,529	5	Entire System	3.11%	\$176,415
1990	51090931	Division Surge Tank Insulation	83,930	83,930	10	Western City and Suburbs	4.77%	\$4,004
1990	51090932	Chlorine Detection Systems	70,371	70,371	5	Entire System	3.11%	\$2,187

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1990	51090933	South Twinsburg Tower & Supply Mains	8,735,808	8,735,808	3	Eastern Suburbs	0.00%	\$0
1990	51090934	Baldwin Chlorine Feed System	105,986	105,986	11	Eastern City and Suburbs	0.00%	\$0
1990	51090935	Broadway System Expansion	558,576	558,576	3	Eastern Suburbs	0.00%	\$0
1990	51090936	Baldwin Voltage Cabling System	134,926	134,926	11	Eastern City and Suburbs	0.00%	\$0
1990	51090937	Paint Dover & Brecksville Towers	621,700	621,700	2	Western Suburbs	8.09%	\$50,325
1990	51090938	1991 Cleaning & Relining Main Program	5,196,976	5,196,976	1	Cleveland Only	0.00%	\$0
1991	51091939	Aurora / Bainbridge 36" Main	311,682	311,682	3	Eastern Suburbs	0.00%	\$0
1991	51091940	Liberty-Darrow Water Supply	4,942,739	4,942,739	3	Eastern Suburbs	0.00%	\$0
1991	51091941	PCB Removal at Nottingham	493,576	493,576	3	Eastern Suburbs	0.00%	\$0
1991	51091942	Relining Trunk Mains 91/92	2,329,700	2,329,700	5	Entire System	3.11%	\$72,415
1991	51091943	Repair Nott: Backwash Piping	1,078,095	1,078,095	3	Eastern Suburbs	0.00%	\$0
1991	51091944	Broadway Pump Station Expans	112,527	112,527	3	Eastern Suburbs	0.00%	\$0
1991	51091945	Replace Various Water Mains	2,864,343	2,864,343	6	Undetermined/Unqualified	0.00%	\$0
1991	51091946	Crown Plant Roof Replacement	197,540	197,540	2	Western Suburbs	8.09%	\$15,990
1991	51091947	Baldwin Switchgear Replacement	10,692	10,692	11	Eastern City and Suburbs	0.00%	\$0
1991	51091948	Nottingham Flocculator Replacement	1,045,872	1,045,872	3	Eastern Suburbs	0.00%	\$0
1991	51091949	Baldwin Electrical Renovation	6,595	6,595	11	Eastern City and Suburbs	0.00%	\$0
1991	51091950	Telecommunications Systems	738,144	738,144	5	Entire System	3.11%	\$22,944
1991	51091951	1992 Cleaning & Lining Program	5,160,808	5,160,808	1	Cleveland Only	0.00%	\$0
1991	51091952	Crown Plant Drainage & Rehab	586,172	586,172	2	Western Suburbs	8.09%	\$47,449
1991	51091953	Rehab Trav Water Screens 4	2,297,279	2,297,279	6	Undetermined/Unqualified	0.00%	\$0
1991	51091954	Hadden Pump Station Property Acquisition	50,992	50,992	3	Eastern Suburbs	0.00%	\$0
1991	51091955	Crown Plant Expansion Prof Svs	18,687,244	18,687,244	2	Western Suburbs	8.09%	\$1,512,689
1992	51092960	800 MHz Radio System-Professional Services	2,515,505	2,515,505	6	Undetermined/Unqualified	0.00%	\$0
1992	51092961	Catholic Protection - Kirtland	1,112,107	1,112,107	11	Eastern City and Suburbs	0.00%	\$0
1992	51092962	Clean & Line Highland Road	684,812	684,812	3	Eastern Suburbs	0.00%	\$0
1992	51092963	Computer Network System	144,227	144,227	6	Undetermined/Unqualified	0.00%	\$0
1992	51092964	Fairmount Asbestos	320,263	320,263	11	Eastern City and Suburbs	0.00%	\$0
1992	51092965	Morgan Pump Bldg. Renovation	1,987,804	1,987,804	10	Western City and Suburbs	4.77%	\$94,824
1992	51092966	Clean & Line Trunk Mains 92	2,144,542	2,144,542	5	Entire System	3.11%	\$66,660
1992	51092967	Circulation Main - W. 117 St./Long	58,775	58,775	1	Cleveland Only	0.00%	\$0
1992	51092968	800 MHz Radio System-Construction	21,606,944	21,606,944	6	Undetermined/Unqualified	0.00%	\$0
1992	51092969	Warrensville - Broadway Supply Main	12,046,541	12,046,541	3	Eastern Suburbs	0.00%	\$0
1992	51092970	Bedford Rd Water Supply Main	2,208,574	2,208,574	3	Eastern Suburbs	0.00%	\$0
1992	51092971	Aurora-Solon Supply Main	2,427,047	2,427,047	3	Eastern Suburbs	0.00%	\$0
1992	51092972	Aurora Rd. Supply Main	7,759,618	7,759,618	3	Eastern Suburbs	0.00%	\$0
1992	51092973	Renovate 1201 & 1825 Lakeside Ave	19,495,217	19,495,217	5	Entire System	3.11%	\$605,980
1992	51092974	North Royalton Pump Station & Tank	21,234,486	21,234,486	9	PV and Pearl	0.00%	\$0
1992	51092975	G. Morgan Surge Tank - Painting	149,100	149,100	10	Western City and Suburbs	4.77%	\$7,112
1992	51092976	Fairmount/Baldwin Structural Rehab	123,636	123,636	11	Eastern City and Suburbs	0.00%	\$0
1992	51092977	Nottingham Low/1st High Pump Rehab	4,689,316	4,689,316	3	Eastern Suburbs	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

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1992	51092978	Clean & Line Trunk Mains 199	5,077,214	5,077,214	5	Entire System	3.11%	\$157,818
1992	51092979	Nottingham Roof Rehab	574,811	574,811	3	Eastern Suburbs	0.00%	\$0
1992	51092980	Site Improvements Secondary Stations	646,235	646,235	5	Entire System	3.11%	\$20,087
1993	51093200	GIS - Professional Services	773,576	773,576	5	Entire System	3.11%	\$24,045
1993	51093201	Computer System Integrator Sys	3,069,663	3,069,663	5	Entire System	3.11%	\$95,416
1993	51093202	Citywide Fire Hydrant Replacement	0	0	1	Cleveland Only	0.00%	\$0
1993	51093203	Cleaning & Lining 1994	4,604,579	4,604,579	1	Cleveland Only	0.00%	\$0
1993	51093204	Church Square Water Improvement	236,613	236,613	1	Cleveland Only	0.00%	\$0
1993	51093205	Baldwin Waterworks Rehab	4,594,619	4,594,619	11	Eastern City and Suburbs	0.00%	\$0
1993	51093981	Euclid Creek Erosion Control	259,156	259,156	3	Eastern Suburbs	0.00%	\$0
1993	51093982	Clean & Line Trunk Mains 93/	3,841,421	3,841,421	5	Entire System	3.11%	\$119,405
1993	51093983	Electronic Alarms for Stations	383,468	383,468	5	Entire System	3.11%	\$11,920
1993	51093984	Baldwin Reservoir Rehabilitation	4,498,999	4,498,999	11	Eastern City and Suburbs	0.00%	\$0
1993	51093985	Crown Expansion - Construction	112,004,390	112,004,390	2	Western Suburbs	8.09%	\$9,066,494
1993	51093986	Warrensville Reservoir Painting	1,401,528	1,401,528	3	Eastern Suburbs	0.00%	\$0
1993	51093987	New Hadden Pump Station	4,087,253	4,087,253	3	Eastern Suburbs	0.00%	\$0
1993	51093988	Chemical Feed Systems-All Plants	374,219	374,219	5	Entire System	3.11%	\$11,632
1993	51093989	Catholic Protection Program	2,187,736	2,187,736	5	Entire System	3.11%	\$68,003
1993	51093990	Southwest Quadrant Trunk Mains	16,765,040		2	Western Suburbs	8.09%	\$0
	51093990	1- Bennett West 130 Main (Design & Construction, ODOT)		634,200	4	Pearl Only	0.00%	\$0
	51093990	2- Pearl York Phase IV design		378,003	8	2nd High, PV, and Pearl	0.00%	\$0
	51093990	3- Pearl York Phase IV Construction		2,889,344	8	2nd High, PV, and Pearl	0.00%	\$0
	51093990	4- North Royalton Discharge Main Design		696,625	9	PV and Pearl	0.00%	\$0
	51093990	5- North Royalton Akins Phase II Construction		1,333,517	7	2nd and PV	0.00%	\$0
	51093990	6.a- North Royalton Bennett Phase II (2.97 miles)		4,795,163	4	Pearl Only	0.00%	\$0
	51093990	6.b- North Royalton Broadview, Phase I (0.27 miles)		476,463	7	2nd and PV	0.00%	\$0
	51093990	7- Engle Main (City of Middleburg Heights)		3,017,090	8	2nd High, PV, and Pearl	0.00%	\$0
	51093990	8- Sheldon Main Design		387,176	2	Western Suburbs	8.09%	\$31,341
	51093990	9- Sheldon Main Construction		2,529,972	2	Western Suburbs	8.09%	\$204,795
1993	51093991	Environmental Assessment	941,792	941,792	6	Undetermined/Unqualified	0.00%	\$0
1993	51093992	SCADA System Enhancements	1,342,071	1,342,071	5	Entire System	3.11%	\$41,716
1993	51093993	Garrett Morgan Reservoir	4,505	4,505	6	Undetermined/Unqualified	0.00%	\$0
1993	51093995	Garrett Morgan Excitor Modification	192,687	192,687	2	Western Suburbs	8.09%	\$15,598
1993	51093996	Nottingham Reservoir Basin Improvements	7,262	7,262	3	Eastern Suburbs	0.00%	\$0
1993	51093997	West 117th Street Water Main	1,788,850	1,788,850	1	Cleveland Only	0.00%	\$0
1993	51093998	EPA Plant Modification Studies	81	81	6	Undetermined/Unqualified	0.00%	\$0
1994	51094206	Garrett Morgan - Reservoir Enhancements	789,306	789,306	2	Western Suburbs	8.09%	\$63,892
1994	51094207	Curtis Wright Parkway/Bishop	134,049	134,049	3	Eastern Suburbs	0.00%	\$0
1994	51094209	Cleaning & Relining Trunk Mains	2,638,696	2,638,696	5	Entire System	3.11%	\$82,020
1994	51094210	Nottingham Stack Repair / Repl	162,343	162,343	3	Eastern Suburbs	0.00%	\$0
1994	51094211	1995 Cleaning/Lining Dist Mains	4,317,482	4,317,482	1	Cleveland Only	0.00%	\$0

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Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1994	51094212	1995 Catholic Protection Program	174,412	174,412	5	Entire System	3.11%	\$5,421
1994	51094213	Information Architecture	579,583	579,583	6	Undetermined/Unqualified	0.00%	\$0
1995	51095217	95/96 Trunk Main Cleaning & Lining	4,033,506	4,033,506	5	Entire System	3.11%	\$125,376
1995	51095218	Mayfield Rd. Water Main	2,026,062	2,026,062	3	Eastern Suburbs	0.00%	\$0
1995	51095219	CIP Professional Services Testing	753,400	753,400	5	Entire System	3.11%	\$23,418
1995	51095220	1996 Distribution Main Clean	5,628,553	5,628,553	1	Cleveland Only	0.00%	\$0
1995	51095221	Prospect Avenue Repairs	525,339	525,339	1	Cleveland Only	0.00%	\$0
1995	51095222	PEP - Crown	3,759,206	3,759,206	2	Western Suburbs	8.09%	\$304,299
1995	51095223	PEP - Morgan	11,595,475	11,595,475	2	Western Suburbs	8.09%	\$938,627
1995	51095224	PEP - Baldwin	5,904,526	5,904,526	11	Eastern City and Suburbs	0.00%	\$0
1995	51095225	PEP - Nottingham	5,157,598	5,157,598	3	Eastern Suburbs	0.00%	\$0
1995	51095226	West 9th Street/Old River Road	271,832	271,832	1	Cleveland Only	0.00%	\$0
1995	51095227	Franklin Boulevard	385,000	385,000	1	Cleveland Only	0.00%	\$0
1996	51096228	1996 Water Tower Painting Program	1,252,448	1,252,448	5	Entire System	3.11%	\$38,930
1996	51096229	Mill Creek Subdivision	356,744	356,744	1	Cleveland Only	0.00%	\$0
1996	51096230	Harvard Avenue Bridge Water Main	166,152	166,152	5	Entire System	3.11%	\$5,165
1996	51096231	West 85th Street	460,627	460,627	1	Cleveland Only	0.00%	\$0
1996	51096232	Water Tank Inspection Program	140,148	140,148	5	Entire System	3.11%	\$4,356
1996	51096233	Parma Reservoir Rehab	8,287,388	8,287,388	2	Western Suburbs	8.09%	\$670,845
1996	51096234	Kirland Pump Station Transfer	130,154	130,154	11	Eastern City and Suburbs	0.00%	\$0
1996	51096235	Darrow Road Supply Main - Phase	13,067	13,067	3	Eastern Suburbs	0.00%	\$0
1996	51096236	1440 Lakeside Feasibility Study	63,803	63,803	1	Cleveland Only	0.00%	\$0
1996	51096237	Spring Road Water Main	189,154	189,154	1	Cleveland Only	0.00%	\$0
1996	51096238	1996/1997 Trunk Main Cleaning & Lining	2,851,756	2,851,756	5	Entire System	3.11%	\$88,643
1996	51096239	Kinsman-Green Supply Main	2,075,955	2,075,955	3	Eastern Suburbs	0.00%	\$0
1996	51096940	Broadview Road Pump Station	102	102	7	2nd and PV	0.00%	\$0
1996	51096241	Cleaning & Lining Distribution Mains	4,096,451	4,096,451	1	Cleveland Only	0.00%	\$0
1996	51096242	Demolish Various Non-Operative Stations	1,124,674	1,124,674	6	Undetermined/Unqualified	0.00%	\$0
1996	51096245	Central Commons 5 & 6	163,408	163,408	1	Cleveland Only	0.00%	\$0
1996	51096246	Kingbury at Herron Row	120,904	120,904	1	Cleveland Only	0.00%	\$0
1996	w96247	City-Wide GIS	35,509,886	35,509,886	5	Entire System	3.11%	\$1,103,772
1996	51096248	Fencing Site Improvements	0	0	6	Undetermined/Unqualified	0.00%	\$0
1997	51097250	East 79th Street	0	0	1	Cleveland Only	0.00%	\$0
1997	51097251	Fulton Road	33,680	33,680	1	Cleveland Only	0.00%	\$0
1997	51097252	Eddy Road	0	0	1	Cleveland Only	0.00%	\$0
1997	51097253	Hough Ave.	31,280	31,280	1	Cleveland Only	0.00%	\$0
1997	51097254	Hand Held Meter Reading System	1,862,704	1,862,704	5	Entire System	3.11%	\$57,899
1997	51097255	Distribution System Hydraulic Model	4,971,352	4,971,352	5	Entire System	3.11%	\$154,527
1997	51097256	Cornell Road	36,540	36,540	1	Cleveland Only	0.00%	\$0
1997	51097257	East 40th Street	3,750	3,750	1	Cleveland Only	0.00%	\$0
1997	51097258	Aetna Road	694,286	694,286	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1997	51097259	Bessemer Ave. (E.65th - E.88th)	38,982	38,982	1	Cleveland Only	0.00%	\$0
1997	51097260	E. 55th St. - Phase I	129,137	129,137	1	Cleveland Only	0.00%	\$0
1997	51097261	East 200th Street	0	0	1	Cleveland Only	0.00%	\$0
1997	51097262	E. 123rd, Arlington & E. 125th	114,173	114,173	1	Cleveland Only	0.00%	\$0
1997	51097263	Cleaning & Lining Distribution Mains	5,796,505	5,796,505	1	Cleveland Only	0.00%	\$0
1997	w97264	PEP Phase I - Design	72,604,503	70,898,446	5	Entire System	3.11%	\$2,203,773
1997	51097266	Nottingham Pump Header Rehab	0	0	3	Eastern Suburbs	0.00%	\$0
1997	51097267	Nottingham Boiler Replacement	568,433	568,433	3	Eastern Suburbs	0.00%	\$0
1997	51097268	Water Vehicles - 1997	2,122,364	2,122,364	6	Undetermined/Unqualified	0.00%	\$0
1998	51098271	Kinsman Water Tower Rehabilitation	2,771,462	2,771,462	3	Eastern Suburbs	0.00%	\$0
1998	51098272	Clean & Line Distribution Mains - 1999	4,661,095	4,661,095	1	Cleveland Only	0.00%	\$0
1998	51098273	Rosewood Avenue	96,800	96,800	1	Cleveland Only	0.00%	\$0
1998	51098274	Dale Avenue	0	0	1	Cleveland Only	0.00%	\$0
1998	51098275	West Superior Road Water Main	505,988	505,988	1	Cleveland Only	0.00%	\$0
1998	51098276	Cost of Issuance - Series I Bonds	788,721	788,721	5	Entire System	3.11%	\$24,516
1998	51098277	Tower Painting and Maintenance	12,523,813	12,523,813	5	Entire System	3.11%	\$389,284
1998	51098278	Trunk Main Cleaning & Lining - Area 98-T2	1,553,255	1,553,255	5	Entire System	3.11%	\$48,281
1998	51098279	New Generator for Pearl Road Pump Station	0	0	4	Pearl Only	0.00%	\$0
1998	51098280	Water Vehicles - 1998	2,226,506	2,226,506	6	Undetermined/Unqualified	0.00%	\$0
1999	51098281	Brookpark Water Main Relocation	254,333	254,333	2	Western Suburbs	8.09%	\$20,588
1999	51098282	Chlorine Ton Cylinder Handling	296,175	296,175	5	Entire System	3.11%	\$9,206
1999	51098283	Lee Road Rehabilitation	230,071	230,071	1	Cleveland Only	0.00%	\$0
1999	51098284	Cleveland Business Park West	496,447	496,447	1	Cleveland Only	0.00%	\$0
1999	51098285	Orchard Park Housing Development	341,914	341,914	1	Cleveland Only	0.00%	\$0
1999	51098286	Euclid Creek Erosion	608,680	608,680	3	Eastern Suburbs	0.00%	\$0
1999	51098287	Replace Water Pump Impellers	0	0	6	Undetermined/Unqualified	0.00%	\$0
1999	51098288	Repair Ball Valve for Pump	0	0	6	Undetermined/Unqualified	0.00%	\$0
1999	51098289	East 55th Street - Phase II	13,685	13,685	1	Cleveland Only	0.00%	\$0
1999	51098290	East 40th Street - Phase III	40,855	40,855	1	Cleveland Only	0.00%	\$0
1999	51098291	East 55th Street - Phase III	57,370	57,370	1	Cleveland Only	0.00%	\$0
1999	51098292	Water Vehicles - 1999	1,671,404	1,671,404	6	Undetermined/Unqualified	0.00%	\$0
2000	51000300	Renovation at Charles Carr Municipal Center	1,248	1,248	1	Cleveland Only	0.00%	\$0
2000	51000301	Clean & Line Water Mains - 2000	5,557,296	5,557,296	1	Cleveland Only	0.00%	\$0
2000	51000302	Denison Ave Bridge - 12" & 30" Water Mains	280,000	280,000	10	Western City and Suburbs	4.77%	\$13,357
2000	51000303	Replace Pump Units at Crown & Morgan	0	0	2	Western Suburbs	8.09%	\$0
2000	51000304	Water Main Repairs Specials	0	0	5	Entire System	3.11%	\$0
2000	51000305	Filter Turbidimeters & Particle Counters	0	0	5	Entire System	3.11%	\$0
2000	51000306	E. 40th Street - Phase II	0	0	1	Cleveland Only	0.00%	\$0
2000	w00310	Morgan Pump Station	46,823,702	46,823,702	10	Western City and Suburbs	4.77%	\$2,233,615
2000	51000311	Baldwin Filter Improvements	34,124,902	34,124,902	11	Eastern City and Suburbs	0.00%	\$0
2000	51000312	Nottingham Filter Improvements	23,530,126	23,530,126	11	Eastern City and Suburbs	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2000	51000313	Rehab E. 110 St.	29,128	29,128	1	Cleveland Only	0.00%	\$0
2000	51000314	Rehab W. 110 St.	13,421	13,421	1	Cleveland Only	0.00%	\$0
2000	51000315	E. 40th Street Phase III	0	0	1	Cleveland Only	0.00%	\$0
2000	51000316	Kirtland Intake Crib Painting	672,860	672,860	11	Eastern City and Suburbs	0.00%	\$0
2000	51000318	W. 22 St. & W. 23 St	0	0	1	Cleveland Only	0.00%	\$0
2000	51000319	Rowley Ave. Sewer - W. 14 to W. 17	16,687	16,687	1	Cleveland Only	0.00%	\$0
2000	51000320	Water Main Rehab - 2001	6,434,559	6,434,559	1	Cleveland Only	0.00%	\$0
2000	51000325	Water Vehicles - 2000	1,904,498	1,904,498	6	Undetermined/Unqualified	0.00%	\$0
2000	51000326	Euclid Corridor - Water Main Replacement	17,160,355	17,160,355	1	Cleveland Only	0.00%	\$0
2001	51001330	Garrett Morgan Museum	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001331	Naples Ave.-E. 153 St.-West End	0	0	1	Cleveland Only	0.00%	\$0
2001	51001332	State Road	49,300	49,300	1	Cleveland Only	0.00%	\$0
2001	51001333	Longwood Apartments	828,410	828,410	1	Cleveland Only	0.00%	\$0
2001	51001336	Water Main Specials	4,203,931	4,203,931	5	Entire System	3.11%	\$130,673
2001	51001337	South Water Mains (Design)	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001339	Kirtland's Motor Rewiring	0	0	11	Eastern City and Suburbs	0.00%	\$0
2001	51001340	Impellers & Associated Items (Crown/Morgan)	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001341	Repair Morgan Rapid Mix Sluice Gate	163,803	163,803	10	Western City and Suburbs	4.77%	\$7,814
2001	51001343	Repair of Crown Sludge Dome	91,500	91,500	2	Western Suburbs	8.09%	\$7,407
2001	51001344	Residuals Handling System @ Garrett Morgan	0	0	10	Western City and Suburbs	4.77%	\$0
2001	51001345	Engineering/Environmental Consulting	164,311	164,311	6	Undetermined/Unqualified	0.00%	\$0
2001	51001346	Central Ave. Rehab Project	23,115	23,115	1	Cleveland Only	0.00%	\$0
2001	51001347	E. 79th St. Rehabilitation Project	43,181	43,181	1	Cleveland Only	0.00%	\$0
2001	51001348	West 159th St. & Melbourne Sewer	12,693	12,693	1	Cleveland Only	0.00%	\$0
2001	51001349	West 31st St. Reconstruction	86,097	86,097	1	Cleveland Only	0.00%	\$0
2001	51001351	Watermain Rehab for Year 2002	6,692,124	6,692,124	1	Cleveland Only	0.00%	\$0
2001	51001352	Nottingham Chemical Project	20,522,522	20,522,522	3	Eastern Suburbs	0.00%	\$0
2001	51001353	Crown Residuals Press Rehab	1,288,020	1,288,020	2	Western Suburbs	8.09%	\$104,262
2001	51001501	Equipment for Distribution Mains	273,000	273,000	5	Entire System	3.11%	\$8,486
2001	51001502	Varian Gas Chromatograph & Accessories	73,028	73,028	6	Undetermined/Unqualified	0.00%	\$0
2001	51001503	Spectrometer and Accessories	87,709	87,709	5	Entire System	3.11%	\$2,726
2001	51001504	Distribution System Instruments	72,309	72,309	5	Entire System	3.11%	\$2,248
2001	51001505	Manual Hand Chain Hoist	3,988	3,988	6	Undetermined/Unqualified	0.00%	\$0
2001	51001506	Motor Rewind Unit- Crown Plant	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001507	Ideal Motor Unit-Morgan Plant	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001508	HP Color Laser Jet Printer	5,300	5,300	6	Undetermined/Unqualified	0.00%	\$0
2001	51001509	Twin Roll Automatic Plain Paper	9,995	9,995	6	Undetermined/Unqualified	0.00%	\$0
2001	51001510	Electric Scissor Lift	9,100	9,100	6	Undetermined/Unqualified	0.00%	\$0
2001	51001511	Acer Milling Machine	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001513	Mueller D-5 Tap Machine	3,360	3,360	6	Undetermined/Unqualified	0.00%	\$0
2001	51001514	Computer Hardware	315,727	315,727	6	Undetermined/Unqualified	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

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2001	51001515	Vehicles first responder program	89,163	89,163	6	Undetermined/Unqualified	0.00%	\$0
2001	51001516	2001 Motorized & Off Road Equipment	2,344,789	2,344,789	6	Undetermined/Unqualified	0.00%	\$0
2001	51001517	LAN Installation	0	0	5	Entire System	3.11%	\$0
2001	51001518	Installation & Testing LAN	785,756	785,756	5	Entire System	3.11%	\$24,424
2001	51001519	Yard Sweeper	42,704	42,704	6	Undetermined/Unqualified	0.00%	\$0
2001	w01520	Configuring, Monitoring, Troubleshooting	366,029	366,029	5	Entire System	3.11%	\$11,377
2001	51001521	Departmental Software CWD/CPP	597,089	597,089	6	Undetermined/Unqualified	0.00%	\$0
2001	51001522	Require K, Repair/Replacement SCADA	1,244,691	1,244,691	5	Entire System	3.11%	\$38,689
2001	51001523	Water Meter Testing Lab Improvements	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001524	Computer Hardware for Water	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001525	Fairmount Pump Station Motor	0	0	11	Eastern City and Suburbs	0.00%	\$0
2001	51001526	CWD Telephone System	0	0	6	Undetermined/Unqualified	0.00%	\$0
2002	51002360	Kinsman Road	1,349,616	1,349,616	1	Cleveland Only	0.00%	\$0
2002	51002361	Western Avenue	166,619	166,619	1	Cleveland Only	0.00%	\$0
2002	51002363	Fairway Ave. Sewer Project	0	0	1	Cleveland Only	0.00%	\$0
2002	w02364	Security Contracts Professional Services	32,456,453	32,254,897	5	Entire System	3.11%	\$1,002,595
2002	51002365	Kirtland Crib Navigation Rehab	0	0	11	Eastern City and Suburbs	0.00%	\$0
2002	51002366	Water Tank Inspection Cycle E	87,091	87,091	6	Undetermined/Unqualified	0.00%	\$0
2002	51002367	Chlorine Monitors	0	0	6	Undetermined/Unqualified	0.00%	\$0
2002	51002368	Floor Crack Repair	0	0	1	Cleveland Only	0.00%	\$0
2002	51002370	Baldwin Chemical Project	29,760,868	29,760,868	11	Eastern City and Suburbs	0.00%	\$0
2002	51002371	Taft Ave. Sewer Replacement	87,564	87,564	1	Cleveland Only	0.00%	\$0
2002	51002372	General Engineering Services	1,947,386	1,947,386	6	Undetermined/Unqualified	0.00%	\$0
2002	51002373	Hurston Court Water Main	130,000	130,000	1	Cleveland Only	0.00%	\$0
2002	51002375	Water Main Rehab for 2003	5,487,570	5,487,570	1	Cleveland Only	0.00%	\$0
2002	w02376	Roof Repair and Replacement	4,855,000	4,492,797	5	Entire System	3.11%	\$139,652
2002	51002377	Rockwell Ave. Water Main	374,429	374,429	1	Cleveland Only	0.00%	\$0
2002	w02380	PEP Program Management Phase II	30,452,555	30,452,542	5	Entire System	3.11%	\$946,572
2002	51002530	Financial Information Budget Software	750,749	750,749	5	Entire System	3.11%	\$23,336
2002	w02531	Electronic Document Management System	1,036,415	1,003,415	5	Entire System	3.11%	\$31,190
2002	w02532	Work Management System	5,397,062	5,397,062	5	Entire System	3.11%	\$167,760
2002	w02533	Computer Hardware Peripherals	5,837,610	5,836,071	6	Undetermined/Unqualified	0.00%	\$0
2002	51002534	Off Road Motorized Equipment	30,168	30,168	6	Undetermined/Unqualified	0.00%	\$0
2002	51002535	Vehicles 2002	2,559,875	2,559,875	6	Undetermined/Unqualified	0.00%	\$0
2003	51003385	Carver Park Estates	193,922	193,922	1	Cleveland Only	0.00%	\$0
2003	51003386	Grayton Road/Puritas Ave.	56,729	56,729	1	Cleveland Only	0.00%	\$0
2003	51003387	Euclid Ave.	345,614	345,614	1	Cleveland Only	0.00%	\$0
2003	51003388	Westpark Ave./Lydian Ave. Sewer	247,708	247,708	1	Cleveland Only	0.00%	\$0
2003	51003389	Baldwin 500K Solar Power System	0	0	11	Eastern City and Suburbs	0.00%	\$0
2003	51003390	Memphis Ave. Rehab	100,000	100,000	1	Cleveland Only	0.00%	\$0
2003	51003392	West 105th Street	181,400	181,400	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

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2003	51003393	Arbor Park Village Ph. II	120,000	120,000	1	Cleveland Only	0.00%	\$0
2003	w03400	Secondary Station Re-Chlorination	590,407	590,407	6	Undetermined/Unqualified	0.00%	\$0
2003	51003401	Cleveland Business Park West W.M.	113,345	113,345	1	Cleveland Only	0.00%	\$0
2003	51003402	Mobile De-Chlorinating Unit	0	0	6	Undetermined/Unqualified	0.00%	\$0
2003	51003405	Water Main Rehab	6,175,763	6,175,763	1	Cleveland Only	0.00%	\$0
2003	51003406	UPS 1201 Lakeside	98,325	98,325	6	Undetermined/Unqualified	0.00%	\$0
2003	51003407	Denison Ave. Water Main Replacement	1,313,653	1,313,653	1	Cleveland Only	0.00%	\$0
2003	51003540	Vehicles 2003	964,185	964,185	6	Undetermined/Unqualified	0.00%	\$0
2003	51003541	Oracle Software License Fees	1,199,932	1,199,932	6	Undetermined/Unqualified	0.00%	\$0
2003	51003545	AMR Firefly Pilot Demonstration	200,000	200,000	6	Undetermined/Unqualified	0.00%	\$0
2003	51003546	System 311	100,000	100,000	6	Undetermined/Unqualified	0.00%	\$0
2003	w03559	CIS Assessment/Design & Implementation	36,300,965	34,640,205	5	Entire System	3.11%	\$1,076,739
2003	w03560	Datamatic Hardware & Software	864,510	864,510	5	Entire System	3.11%	\$26,872
2003	w03563	Various Engineering Prof. Services	781,857	781,857	6	Undetermined/Unqualified	0.00%	\$0
2003	w03565	Voice and Data	5,858,118	5,858,118	6	Undetermined/Unqualified	0.00%	\$0
2004	51004410	SCADA System	0	0	6	Undetermined/Unqualified	0.00%	\$0
2004	51004411	Berea Rd. (Triskett to Detroit)	690,190	690,190	1	Cleveland Only	0.00%	\$0
2004	51004412	Arbor Park Village Ph. III	0	0	1	Cleveland Only	0.00%	\$0
2004	51004413	S. Waterloo Rd.	10,129	10,129	1	Cleveland Only	0.00%	\$0
2004	51004414	Eat 93rd St. Miles Ave. Union	112,102	112,102	1	Cleveland Only	0.00%	\$0
2004	w04415	Nottingham Floc/Sed/Residuals	23,104,967	23,104,967	3	Eastern Suburbs	0.00%	\$0
2004	w04416	Pump & Motor Impellers - Various Stations	359,179	359,179	5	Entire System	3.11%	\$11,165
2004	51004417	Electrical Power Reliability	24,192,454	24,192,454	5	Entire System	3.11%	\$751,986
2004	51004418	Valley Road	251,394	251,394	1	Cleveland Only	0.00%	\$0
2004	w04420	General Engineering Services	3,704,381	3,704,381	6	Undetermined/Unqualified	0.00%	\$0
2004	51004421	Nottingham Backwash Clarifier	7,222,367	7,222,367	3	Eastern Suburbs	0.00%	\$0
2004	51004422	Brunswick System Improvements	3,250,000	3,250,000	4	Pearl Only	0.00%	\$0
2004	51004423	East 4th Street	55,000	55,000	1	Cleveland Only	0.00%	\$0
2004	51004425	Water Main Rehab 2005	6,151,459	6,151,459	1	Cleveland Only	0.00%	\$0
2004	51004427	Harvard Yards Building Improvements	1,387,713	1,387,713	5	Entire System	3.11%	\$43,135
2004	w04428	Water Plant Valves	168,196	168,196	5	Entire System	3.11%	\$5,228
2004	w04429	Nottingham Administration Building	5,047,445	4,976,450	3	Eastern Suburbs	0.00%	\$0
2004	w04430	Baldwin Rapid Mix	27,162,387	27,162,387	11	Eastern City and Suburbs	0.00%	\$0
2004	w04431	East 176th Street	0	0	1	Cleveland Only	0.00%	\$0
2004	w04570	Monitoring Capital Projects	1,309,710	1,217,335	5	Entire System	3.11%	\$37,839
2004	51004571	Network Back-Up at 205 St. Clair	960,300	960,300	5	Entire System	3.11%	\$29,849
2004	w04572	Switchgear & Motor Control Repairs	470,289	470,289	5	Entire System	3.11%	\$14,618
2004	w04580	Biological Testing Equipment	54,820	54,820	5	Entire System	3.11%	\$1,704
2004	w04581	Time & Attendance Workforce System (ADP)	385,553	385,553	6	Undetermined/Unqualified	0.00%	\$0
2004	51004582	Vehicles 2004	2,326,947	2,326,947	6	Undetermined/Unqualified	0.00%	\$0
2004	51004585	Lawn Mowers & Trailers	36,475	36,475	6	Undetermined/Unqualified	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2004	51004586	Building & Furniture - Parma Control	0	0	8	2nd High, PV, and Pearl	0.00%	\$0
2004	w04587	Chemical Feeder Process Improvements	139,537	139,537	6	Undetermined/Unqualified	0.00%	\$0
2005	51005435	Crown Water Works Plant	133,964	133,964	2	Western Suburbs	8.09%	\$10,844
2005	51005436	Culvert under Courtland Blvd.	64,543	64,543	1	Cleveland Only	0.00%	\$0
2005	51005440	Morgan Filter Rehab Construction	26,225,323	26,225,323	10	Western City and Suburbs	4.77%	\$1,251,018
2005	w05441	Tower City Center Water Infrastructure	1,398,306	1,304,137	1	Cleveland Only	0.00%	\$0
2005	w05442	Cleaning & Cement Mortar Lining - 2006	4,828,442	4,828,442	1	Cleveland Only	0.00%	\$0
2005	51005443	Morgan Pump Station Demolition	1,727,411	1,727,411	10	Western City and Suburbs	4.77%	\$82,402
2005	51005444	West 44th Street Bridge	66,694	66,694	1	Cleveland Only	0.00%	\$0
2005	w05445	Microwave 800 MHz	0	0	6	Undetermined/Unqualified	0.00%	\$0
2005	w05446	Nottingham Pump Control	2,715,816	2,715,816	3	Eastern Suburbs	0.00%	\$0
2005	w05450	Meter Automation AMR -- Old-- Large Meter Right Sizing	94,014,547	46,614,132	5	Entire System	3.11%	\$1,448,931
2005	51005590	Vehicles 2005	1,796,922	1,796,922	6	Undetermined/Unqualified	0.00%	\$0
2005	51005591	Computer Hardware & Software	0	0	6	Undetermined/Unqualified	0.00%	\$0
2006	w06451	Jennings Road Improvements	40,048	40,048	1	Cleveland Only	0.00%	\$0
2006	w06452	Morgan East Reservoir	39,129,223	39,129,223	10	Western City and Suburbs	4.77%	\$1,866,568
2006	w06453	Flats East Bank	0	0	1	Cleveland Only	0.00%	\$0
2006	w06455	Keller II Water Tower	4,358,000	4,276,142	4	Pearl Only	0.00%	\$0
2006	51006456	Fisher Road Restoration	57,500	57,500	1	Cleveland Only	0.00%	\$0
2006	51006457	Kirtland Crib - Steel Protection	84,080	84,080	11	Eastern City and Suburbs	0.00%	\$0
2006	w06458	Water Main Rehab 2007	5,781,833	5,781,833	1	Cleveland Only	0.00%	\$0
2006	w06459	Renovations 1201 Lakeside	2,050,000	1,503,054	5	Entire System	3.11%	\$46,720
2006	w06460	Warehouse Improvements Ph I & II	10,775,663	10,563,011	5	Entire System	3.11%	\$328,335
2006	w06461	General Engineering Services	2,888,735	2,888,735	6	Undetermined/Unqualified	0.00%	\$0
2006	w06592	Oracle Licenses	968,640	968,640	6	Undetermined/Unqualified	0.00%	\$0
2006	w06593	Distribution & Maintenance Equipment	329,860	329,860	6	Undetermined/Unqualified	0.00%	\$0
2006	w06594	Vehicles 2006	1,836,323	1,836,323	6	Undetermined/Unqualified	0.00%	\$0
2006	51006595	Office Furniture	0	0	6	Undetermined/Unqualified	0.00%	\$0
2006	w06596	Computer Hardware & Software	805,619	804,299	6	Undetermined/Unqualified	0.00%	\$0
2006	51006597	Plasma Mass Spectrometer	201,168	201,168	6	Undetermined/Unqualified	0.00%	\$0
2007	w07465	Raw Water Monitoring System	178,237	178,237	6	Undetermined/Unqualified	0.00%	\$0
2007	w07466	Crown Water Plant	24,579,400	13,128,815	10	Western City and Suburbs	4.77%	\$626,279
2007	w07467	Quincy Ave. Rehab	726,810	726,810	1	Cleveland Only	0.00%	\$0
2007	w07468	Kammis Corner Underground Duct	172,426	84,743	1	Cleveland Only	0.00%	\$0
2007	w07469	Kammis Corner Streetscape	26,110	26,110	1	Cleveland Only	0.00%	\$0
2007	w07470	West 150th St. Reconstruction	197,209	197,209	1	Cleveland Only	0.00%	\$0
2007	w07471	Cornell Road Bridge	197,065	197,065	1	Cleveland Only	0.00%	\$0
2007	w07472	Woodland Ave. & Kinsman Road	339,336	339,336	1	Cleveland Only	0.00%	\$0
2007	w07473	Kirtland Pump Station Rehab	17,327,102	17,302,602	11	Eastern City and Suburbs	0.00%	\$0
2007	w07474	Big Creek Watershed Stormwater	136,000	136,000	1	Cleveland Only	0.00%	\$0
2007	w07475	Water Main Rehab 2008	5,568,852	5,568,852	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2007	w07476	Fairmount Pump Station Rehab	22,246,927	22,199,169	11	Eastern City and Suburbs	0.00%	\$0
2007	w07477	Suburban Watermain Renewal - Year 1 - Year 5	45,000,000	40,913,620	17	Suburbs - New Agreement	0.00%	\$0
2007	w07478	Morgan Pretreatment and Residuals	40,805,768	39,857,013	10	Western City and Suburbs	4.77%	\$1,901,285
2007	w07479	Aetna Road Bridge	243,241	243,241	1	Cleveland Only	0.00%	\$0
2007	w07480	Sustainability Program	0	0	6	Undetermined/Unqualified	0.00%	\$0
2007	w07481	Trunk Main Renewal Program	0	0	6	Undetermined/Unqualified	0.00%	\$0
2007	w07482	Facilities Improvements	0	0	6	Undetermined/Unqualified	0.00%	\$0
2007	w07600	Vehicles 2007	2,985,506	2,985,506	6	Undetermined/Unqualified	0.00%	\$0
2007	w07601	Computer Hardware & Software	375,232	375,232	6	Undetermined/Unqualified	0.00%	\$0
2007	51007602	Citywide Permit System Hardware	82,584	82,584	6	Undetermined/Unqualified	0.00%	\$0
2008	w08483	Replace & rehab cranes @ Water Plants & P.S.	119,715	119,715	5	Entire System	3.11%	\$3,721
2008	51008484	Bellaire Road Rehabilitation - Ph. I	116,412	116,412	1	Cleveland Only	0.00%	\$0
2008	51008485	Avenue District: E. 12th St.-Lakeside to St. Clair	26,799	26,799	1	Cleveland Only	0.00%	\$0
2008	w08486	Rehabilitation of E. 30th St.	888,140	639,807	1	Cleveland Only	0.00%	\$0
2008	w08487	Bellaire Road Rehabilitation - Ph. II	85,374	85,374	1	Cleveland Only	0.00%	\$0
2008	w08488	Rehabilitation of Broadway Ave.	565,180	221,977	1	Cleveland Only	0.00%	\$0
2008	w08489	GIS Build-Out @ 205 St. Clair	240,685	240,685	5	Entire System	3.11%	\$7,481
2008	w08490	Water Tank Rehabilitation	7,226,554	6,967,774	5	Entire System	3.11%	\$216,583
2008	51008491	Roof Rehabilitation and Replacement at Non-Plant Facility	1,017,545	1,017,545	5	Entire System	3.11%	\$31,629
2008	51008492	Fencing at Green Rd. Pump Station	71,596	71,596	11	Eastern City and Suburbs	0.00%	\$0
2008	w08493	Aurora Rd. Pump Station & Water Mains	7,103,474	7,103,474	11	Eastern City and Suburbs	0.00%	\$0
2008	w08494	Cook Rd. Tower & Water Mains	0	0	6	Undetermined/Unqualified	0.00%	\$0
2008	w08495	The Avenues Phase 3	45,450	45,450	1	Cleveland Only	0.00%	\$0
2008	w08496	Water Main Rehab 2009	4,420,286	4,420,286	1	Cleveland Only	0.00%	\$0
2008	w08497	General Engineering Services - Phase V	3,452,545	3,442,890	6	Undetermined/Unqualified	0.00%	\$0
2008	w08498	Baldwin Residuals & Reservoir	17,207,616	16,511,532	11	Eastern City and Suburbs	0.00%	\$0
2008	w08499	Brecksville Distribution Water Quality Improvements	228,679	215,680	12	2nd High - West	0.00%	\$0
2008	51008603	Replacement of Turbidimeters	30,240	30,240	5	Entire System	3.11%	\$940
2008	w08604	Vehicles 2008	755,941	755,941	6	Undetermined/Unqualified	0.00%	\$0
2008	w08605	Payment Remittance Processing	450,000	414,034	5	Entire System	3.11%	\$12,870
2008	51008606	Gas Chromatograph & Appertenances	62,011	62,011	5	Entire System	3.11%	\$1,928
2008	51008607	Replacement of Large Submersible Pumps at Various	40,000	40,000	6	Undetermined/Unqualified	0.00%	\$0
2008	w08608	Replacement of Large Valve Actuators for Independent	53,000	47,625	5	Entire System	3.11%	\$1,480
2008	w08609	2008 Computer Hardware and Software	1,243,684	1,243,223	6	Undetermined/Unqualified	0.00%	\$0
2009	w09100	West 77th Street Bridge	108,310	108,310	1	Cleveland Only	0.00%	\$0
2009	w09101	Detroit Ave. Streetscape	91,642	91,642	6	Undetermined/Unqualified	0.00%	\$0
2009	w09102	Property Acquisition @ 4204 Harvard Ave.	68,000	68,000	5	Entire System	3.11%	\$2,114
2009	w09103	Rehabilitation of Superior Ave.	965,131	690,006	1	Cleveland Only	0.00%	\$0
2009	w09104	Rehabilitation of Central Ave.	227,000	205,910	1	Cleveland Only	0.00%	\$0
2009	w09105	South Woodland Express Main	873,329	873,329	11	Eastern City and Suburbs	0.00%	\$0
2009	w09106	Morgan Chemical Facility	17,521,405	17,078,064	10	Western City and Suburbs	4.77%	\$814,669

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2009	w09107	Energy Management	2,000,000	0	6	Undetermined/Unqualified	0.00%	\$0
2009	w09108	Cedar Road Reconstruction	1,232,000	999,625	11	Eastern City and Suburbs	0.00%	\$0
2009	w09109	Watermain Rehabilitation 2010	6,557,248	5,445,013	1	Cleveland Only	0.00%	\$0
2009	w09110	Harvard Yards Facility Modifications	867,315	663,096	5	Entire System	3.11%	\$20,611
2009	w09111	Aurora Rd. Pump Station Engineering Services	0	0	11	Eastern City and Suburbs	0.00%	\$0
2009	w09112	Old River Channel Bulkheads	0	0	1	Cleveland Only	0.00%	\$0
2009	w09610	Automated Vehicle Location System	540,585	378,335	6	Undetermined/Unqualified	0.00%	\$0
2009	w09611	Vehicles 2009	2,498,471	1,552,489	6	Undetermined/Unqualified	0.00%	\$0
2010	w10113	Transmission Main Renewal Program	8,000,000	1,951,964	5	Entire System	3.11%	\$60,674
2010	w10114	Municipal Solid Waste Energy Project	0	0	6	Undetermined/Unqualified	0.00%	\$0
2010	w10115	Lorain Avenue Resurfacing	29,525	0	1	Cleveland Only	0.00%	\$0
2010	w10116	General Engineering Services Ph. VI	3,296,166	2,746,868	6	Undetermined/Unqualified	0.00%	\$0
2010	w10117	Marlin Luther King Blvd.	402,000	135,619	1	Cleveland Only	0.00%	\$0
2010	w10118	E. 88th/Crane/E.91st Reconstruction	408,000	212,525	1	Cleveland Only	0.00%	\$0
2010	w10119	Security Upgrades & Improvements	284,995	278,190	5	Entire System	3.11%	\$8,647
2010	w10120	Lakefront West Pedestrian Tunnels	14,290	14,290	1	Cleveland Only	0.00%	\$0
2010	w10122	E. 93rd St. Bridge Rehab	16,147	0	1	Cleveland Only	0.00%	\$0
2010	w10123	Water Main Rehabilitation 2011	3,000,000	1,715,540	1	Cleveland Only	0.00%	\$0
2010	w10124	Bessemer Avenue Phase 2A	293,241	293,241	1	Cleveland Only	0.00%	\$0
2010	w10612	Computer Hardware & Software 2010	338,000	337,563	6	Undetermined/Unqualified	0.00%	\$0
2010	w10613	Security/CNL Project	40,000	40,000	5	Entire System	3.11%	\$1,243
2010	w10614	Major Repair & Upgrade of Nottingham Basin Chain S	120,000	119,505	11	Eastern City and Suburbs	0.00%	\$0
2010	w10615	TASC Cubicles	15,000	13,964	6	Undetermined/Unqualified	0.00%	\$0
2010	w10616	GIS SAN	165,719	165,719	5	Entire System	3.11%	\$5,151
2011	w11125	Morgan Raw Water Pump Station Improvements	5,733,200	5,406,803	10	Western City and Suburbs	4.77%	\$257,919
2011	w11126	E. 78th St. Relocation	16,000	0	1	Cleveland Only	0.00%	\$0
2011	w11127	Water Main Rehabilitation 2012	3,105,000	1,905,138	1	Cleveland Only	0.00%	\$0
2011	w11128	Morgana Run-Phase 1: E. 71st Street	290,377	290,377	1	Cleveland Only	0.00%	\$0
2011	c11210	Madison Ave. Rehabilitation	0	0	1	Cleveland Only	0.00%	\$0
2011	c11203	Cedar Ave. (E. 89th St. to MLK Blvd.)	0	0	1	Cleveland Only	0.00%	\$0
2011	c11216	SR 87 (Woodland Ave.) Rehabilitation (E. 55th St. to B	0	0	1	Cleveland Only	0.00%	\$0
2011	w11132	1825 Lakeside Avenue Improvements	210,000	134,202	5	Entire System	3.11%	\$4,171
2011	w11133	Detroit Avenue Streetscape (West 73rd to West 58th)	8,400	0	1	Cleveland Only	0.00%	\$0
2011	w11134	Ackley/Union/Broadway	13,092	0	1	Cleveland Only	0.00%	\$0
2011	w11135	Fulton Road from Denison to Clark	237,150	220,929	1	Cleveland Only	0.00%	\$0
2011	w11617	Computer Hardware	152,486	152,262	6	Undetermined/Unqualified	0.00%	\$0
2011	w11618	Street Restoration - 2011	50,000	0	1	Cleveland Only	0.00%	\$0
2011	w11619	Purchase of Laboratory Equipment	100,000	0	6	Undetermined/Unqualified	0.00%	\$0
2012	w12136	Lakeshore Blvd. Resurfacing	16,450	0	1	Cleveland Only	0.00%	\$0
2012	w12137	Cedar Avenue (E. 55th to E. 89th)	476,471	2,864	1	Cleveland Only	0.00%	\$0
2012	w12138	Waterloo Road Reconstruction	354,375	0	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Miles

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2012	w12139	General Engineering Services VII	3,510,560	16,884	6	Undetermined/Unqualified	0.00%	\$0
2012	w12140	Fleet Avenue	418,638	0	1	Cleveland Only	0.00%	\$0
2012	w12141	Control Systems Rehab	240,000	125,187	5	Entire System	3.11%	\$3,891
2012	w12142	Triskett Avenue Rehab	257,875	0	1	Cleveland Only	0.00%	\$0
2012	w12143	Larchmere Blvd. Rehab	125,625	0	1	Cleveland Only	0.00%	\$0
2012	w12144	Madison/W. 61 St. Bridge	57,520	57,520	1	Cleveland Only	0.00%	\$0
2012	w12145	West 74th St. Bridge	32,730	32,730	1	Cleveland Only	0.00%	\$0
2012	w12146	800 MHz Radio	2,819,933	2,819,933	5	Entire System	3.11%	\$87,653
2012	w12147	800 MHz Radio "A"	3,460,622	3,257,991	5	Entire System	3.11%	\$101,270
2012	w12148	Brainard Road Express Main	3,500,000	0	15	Cedar	0.00%	\$0
2012	w12149	Watermain Renewal 2013	7,700,866	0	1	Cleveland Only	0.00%	\$0
2012	w12150	Suburban Water Main Renewal Program Year 6 - Year 10	12,000,000	0	17	Suburbs - New Agreement	0.00%	\$0
2012	w12151	Quigley Avenue Water Main	90,000	89,934	1	Cleveland Only	0.00%	\$0
2012	w12620	Distribution and Maintenance Equipment	207,342	22,875	5	Entire System	3.11%	\$711
2012	w12621	Computer Hardware 2012	462,100	453,998	5	Entire System	3.11%	\$14,112
2012	w12622	Vehicles 2012	2,462,500	1,149,995	6	Undetermined/Unqualified	0.00%	\$0
2012	w12624	Utility Vehicles (Gators)	77,200	76,604	6	Undetermined/Unqualified	0.00%	\$0
2012	w12625	1060 Lakeside Improvements	40,000	35,912	1	Cleveland Only	0.00%	\$0
2012	w12626	West 54th Street	64,103	44,050	1	Cleveland Only	0.00%	\$0
2013	w13152	Harvard Ave Bridge Rehabilitation	6,930	6,930	1	Cleveland Only	0.00%	\$0
2013	w13153	Woodland Ave. & Buckeye Rd Rehabilitation	125,200	0	1	Cleveland Only	0.00%	\$0
2013	w13155	Secondary Station Improvements Cycle F	4,433,000	0	5	Entire System	3.11%	\$137,793
2013	w13627	Portable Potable Water Dispensing Trailer	44,100	0	5	Entire System	3.11%	\$1,371
2013	w13628	Computer Hardware & Software 2013	184,139	0	5	Entire System	3.11%	\$5,724
								\$0
								\$0
		totals	1,939,103,586	1,818,178,154				46,880,111

Capital Projects Listing - Westlake Allocation by Inch-Mile

Total Allocation to Westlake	\$50,131,428
Total Capital Program	\$1,939,103,586

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1981	085001	Direct Acquisition	341,863	341,863	6	Undetermined/Unqualified	0.00%	\$0
1981	085002	Consult Pulling Machine	21,598	21,598	6	Undetermined/Unqualified	0.00%	\$0
1981	085003	Meters	3,917,621	3,917,621	5	Entire System	3.35%	\$131,158
1981	085005	Drafting Equipment	480	480	6	Undetermined/Unqualified	0.00%	\$0
1981	085006	Main Broadview Spring to Broadview	541,157	541,157	1	Cleveland Only	0.00%	\$0
1981	085007	RT 290 Sec) 27 Relocation	757	757	6	Undetermined/Unqualified	0.00%	\$0
1981	085008	Broadview & N Schaff-Engineer	1,226	1,226	1	Cleveland Only	0.00%	\$0
1981	085009	Recirculation-sludge system	594	594	6	Undetermined/Unqualified	0.00%	\$0
1981	085011	Solon water tower	138	138	3	Eastern Suburbs	0.00%	\$0
1982	085012	Replace Filters Nottingham	235,493	235,493	3	Eastern Suburbs	0.00%	\$0
1982	085014	Trunk Main Rldge Rd	753,685	753,685	2	Western Suburbs	8.40%	\$63,311
1982	085015	New 1 20 mg. Reservoir Warrens	4,070,150	4,070,150	3	Eastern Suburbs	0.00%	\$0
1982	085016	Replace old 1915 elevator	46	46	6	Undetermined/Unqualified	0.00%	\$0
1982	085018	Trunk Main 24" East 71-74 HA	41,407	41,407	11	Eastern City and Suburbs	0.00%	\$0
1982	085019	Increase First High Service	173,000	173,000	5	Entire System	3.35%	\$5,792
1982	085020	Automation - Instruments Engineering	325	325	6	Undetermined/Unqualified	0.00%	\$0
1982	085021	Replace sections of roofing	80,350	80,350	6	Undetermined/Unqualified	0.00%	\$0
1982	085022	Study for discharge piping	3,258	3,258	6	Undetermined/Unqualified	0.00%	\$0
1982	085023	Engineer ETC for Expansion Engle	2,220,210	2,220,210	8	2nd High, PV, and Pearl	0.00%	\$0
1982	085024	Engineer ETC for Expansion Pearl	257,325	257,325	4	Pearl Only	0.00%	\$0
1982	085025	Replace sump pump Nottingham	96	96	3	Eastern Suburbs	0.00%	\$0
1982	085026	Expansion Pleasant Valley Reservoir	155,658	155,658	8	2nd High, PV, and Pearl	0.00%	\$0
1982	085028	Study improvements-Baldwin	2,667,203	2,667,203	11	Eastern City and Suburbs	0.00%	\$0
1983	085029	Install alarm system	46	46	6	Undetermined/Unqualified	0.00%	\$0
1983	085031	Pearl Rd Main Boston RD Sec B	1,624,301	1,624,301	4	Pearl Only	0.00%	\$0
1983	085032	Bagley & Whitney Main	1,425,022	1,425,022	8	2nd High, PV, and Pearl	0.00%	\$0
1983	085033	Backup pump at Independence	3,985	3,985	8	2nd High, PV, and Pearl	0.00%	\$0
1983	085034	Backup pump at Cedar-Winch	8,899	8,899	3	Eastern Suburbs	0.00%	\$0
1983	085035	Backup pump at Pleasant Valley	642,403	642,403	7	2nd and PV	0.00%	\$0
1983	085036	1480 (1039) Cleveland & Brooklyn	269	269	1	Cleveland Only	0.00%	\$0
1983	085037	3000 Gallon Tower Blossom	1,956,685	1,956,685	7	2nd and PV	0.00%	\$0
1983	085038	1st High Booster pump at Can	750	750	6	Undetermined/Unqualified	0.00%	\$0
1983	085039	Restricted Main Webster Road	1,092	1,092	6	Undetermined/Unqualified	0.00%	\$0
1983	085040	Expand Crown Filter	22,736	22,736	2	Western Suburbs	8.40%	\$1,910
1983	085041	CUY CR City Lee Rd. in Shaker	2,503	2,503	3	Eastern Suburbs	0.00%	\$0
1983	085042	CUY City Warrensville Ctr. Rd.	2,227	2,227	3	Eastern Suburbs	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Inch-Mile

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1983	085043	CUY City Pearl Rd. Strongsville	1,161	1,161	4	Pearl Only	0.00%	\$0
1983	085044	CUY City Harvard Rd. Moreland	47	47	3	Eastern Suburbs	0.00%	\$0
1983	085045	Force A/C SB 303-691 Center	20	20	6	Undetermined/Unqualified	0.00%	\$0
1983	085046	Division Filter Study - Stru	88,711	88,711	10	Western City and Suburbs	5.23%	\$4,638
1983	085047	Rehab Sub Electric Facilities	60	60	6	Undetermined/Unqualified	0.00%	\$0
1984	085048	Cleaning & Relining Program	1,798,297	1,798,297	5	Entire System	3.35%	\$60,205
1984	085049	Pitometer Survey of Distribution	491,693	491,693	5	Entire System	3.35%	\$16,461
1984	085050	Install Roms	1,473,104	1,473,104	6	Undetermined/Unqualified	0.00%	\$0
1984	085051	Strongsville Maintenance Yards Construction	186,863	186,863	8	2nd High, PV, and Pearl	0.00%	\$0
1984	085052	2 Yr Study Plan Etc Cud	100,967	100,967	6	Undetermined/Unqualified	0.00%	\$0
1984	085053	8" Main in Hudson Ave E 105	462	462	1	Cleveland Only	0.00%	\$0
1984	085054	ODOT Force Account 1480	604,640	604,640	5	Entire System	3.35%	\$20,243
1984	085055	Fencing & Landscaping Baldwin	92,955	92,955	11	Eastern City and Suburbs	0.00%	\$0
1984	085056	Shoring & Retaining Baldwin	170,892	170,892	3	Eastern Suburbs	0.00%	\$0
1984	085057	Fencing & Security Nottingham	12,093	12,093	3	Eastern Suburbs	0.00%	\$0
1984	085058	Cleaning & Relining Mains by CWD	2,210	2,210	6	Undetermined/Unqualified	0.00%	\$0
1984	085059	Electrical Appurtenances & Var	490	490	6	Undetermined/Unqualified	0.00%	\$0
1984	085060	Cleaning & Relining Mains	1,364,375	1,364,375	5	Entire System	3.35%	\$45,678
1984	085061	Main Burke Ave at E78th	100,907	100,907	1	Cleveland Only	0.00%	\$0
1984	085062	Main E78th from Burke Ave to Ma	44,677	44,677	1	Cleveland Only	0.00%	\$0
1984	085063	Replace 40 Hydrant Valves W1	296,579	296,579	7	2nd and PV	0.00%	\$0
1984	085064	Preliminary Eng Division set	400	400	6	Undetermined/Unqualified	0.00%	\$0
1984	085065	Completely Remove Warrensville	211	211	3	Eastern Suburbs	0.00%	\$0
1984	085066	Telemetering Etc #2 Pump Eng	11,134	11,134	6	Undetermined/Unqualified	0.00%	\$0
1984	085067	Install valves at Cedar Winchester	683	683	3	Eastern Suburbs	0.00%	\$0
1984	085068	City via ODOT county Force	34	34	6	Undetermined/Unqualified	0.00%	\$0
1984	085069	Main-Cleveland Industrial	376	376	1	Cleveland Only	0.00%	\$0
1984	085070	Misc Maintenance Service	18	18	6	Undetermined/Unqualified	0.00%	\$0
1985	085071	Renovation of Wastewater - D	5,554	5,554	6	Undetermined/Unqualified	0.00%	\$0
1985	085072	Replace Roofing System at Facility	162,653	162,653	6	Undetermined/Unqualified	0.00%	\$0
1985	085073	Restore Backwash Water Reservoir	6,855	6,855	6	Undetermined/Unqualified	0.00%	\$0
1985	085074	Site Purchase Highland-Brecksville	55	55	7	Undetermined/Unqualified	0.00%	\$0
1985	085075	Waterwork-Pearl Rd	292	292	8	2nd and PV	0.00%	\$0
1985	085076	Clean & Relining Water mains	2,037,884	2,037,884	5	Entire System	3.35%	\$68,226
1985	085077	Replace Valves at Nottingham	96,781	96,781	3	Eastern Suburbs	0.00%	\$0
1985	085078	Replace Butterfly Valves at Nottingham	479	479	3	Eastern Suburbs	0.00%	\$0
1985	085079	Replace Chlorinator - Nottingham	232	232	3	Eastern Suburbs	0.00%	\$0
1985	085080	ODOT Richmond Rd RT 175	357	357	3	Eastern Suburbs	0.00%	\$0
1985	085081	Clean & Relining Water mains	36,483	36,483	5	Entire System	3.35%	\$1,221
1985	085082	Euclid Creek Flood Control	38	38	3	Eastern Suburbs	0.00%	\$0
1985	085083	Crown Intake Restoration	1,642,811	1,642,811	2	Western Suburbs	8.40%	\$138,000

Capital Projects Listing - Westlake Allocation by Inch-Mile

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1985	085084	Clean & Relining Supply Mains	2,272,543	2,272,543	5	Entire System	3.35%	\$76,082
1985	085085	Computerized Drafting system	225,791	225,791	6	Undetermined/Unqualified	0.00%	\$0
1985	085086	Computer Record System	90,100	90,100	6	Undetermined/Unqualified	0.00%	\$0
1985	085087	Install Telemetering -Seven Hills	46	46	6	Undetermined/Unqualified	0.00%	\$0
1985	085088	Rehab Driveway at DPU Building	152,136	152,136	1	Cleveland Only	0.00%	\$0
1985	085089	Maintenance work at Baldwin	83,490	83,490	11	Eastern City and Suburbs	0.00%	\$0
1985	085090	Replace Roof-Radio Repair	39,990	39,990	5	Entire System	3.35%	\$1,339
1985	085091	Clean & reline 85K Ft Mains	3,115,850	3,115,850	5	Entire System	3.35%	\$104,316
1985	085093	Electrification at Division	67	67	6	Undetermined/Unqualified	0.00%	\$0
1985	085094	Electrification at Division	27,654	27,654	10	Western City and Suburbs	5.23%	\$1,446
1985	085096	New Filtration Facilities	25,999	25,999	6	Undetermined/Unqualified	0.00%	\$0
1985	085097	Miscellaneous	510,266	510,266	6	Undetermined/Unqualified	0.00%	\$0
1985	085098	Consulting	122,953	122,953	6	Undetermined/Unqualified	0.00%	\$0
1985	085099	Water Main E9th	465,983	465,983	1	Cleveland Only	0.00%	\$0
1985	085100	Crown Intake Diving	157,970	157,970	2	Western Suburbs	8.40%	\$13,270
1985	085101	Clean & Line Mains 1985	2,376,236	2,376,236	5	Entire System	3.35%	\$79,554
1986	086001	Baldwin Sludge Rehabilitation	12,819,417	12,819,417	3	Eastern Suburbs	0.00%	\$0
1986	086010	Division Rehabilitation	104,180,086	104,180,086	10	Western City and Suburbs	5.23%	\$5,446,871
1986	086011	Division Rehabilitation/Professional services	10,809,067	10,809,067	10	Western City and Suburbs	5.23%	\$565,133
1986	086030	Nottingham 2nd high rehab	2,804	2,804	3	Eastern Suburbs	0.00%	\$0
1986	086035	Water Main, State-Brecksville	3,323,986	3,323,986	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086040	Water Mains, various	121,425	121,425	1	Cleveland Only	0.00%	\$0
1986	086045	Crown sludge Rehab	7,682,507	7,682,507	2	Western Suburbs	8.40%	\$645,347
1986	086050	Nottingham sludge rehab	7,143,472	7,143,472	3	Eastern Suburbs	0.00%	\$0
1986	086055	Independence Addition	253,433	253,433	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086060	Cedar-Winchester Rehab	258,481	258,481	3	Eastern Suburbs	0.00%	\$0
1986	086070	Water main, W65th-Detroit Ave	5,339	5,339	1	Cleveland Only	0.00%	\$0
1986	086075	Crown Masonry Rehab	248,558	248,558	2	Western Suburbs	8.40%	\$20,879
1986	086080	Nottingham Land Improvements	4,938	4,938	3	Eastern Suburbs	0.00%	\$0
1986	086085	Shepard Station Improvements	303,588	303,588	3	Eastern Suburbs	0.00%	\$0
1986	086095	Pitometer services	288,171	288,171	5	Entire System	3.35%	\$9,648
1986	086100	Kirland Parking Garage	86,553	86,553	6	Undetermined/Unqualified	0.00%	\$0
1986	086105	Water Main, Highland-Richmond	360,396	360,396	3	Eastern Suburbs	0.00%	\$0
1986	086110	Parma Control SCADA System	1,340,333	1,340,333	5	Entire System	3.35%	\$44,873
1986	086120	Water Main, Brecksville Rd	534	534	7	2nd and PV	0.00%	\$0
1986	086125	Clean & Relining Mains 1985	3,712	3,712	6	Undetermined/Unqualified	0.00%	\$0
1986	086130	Water Main, W6th-Lakeside Ave	295,655	295,655	1	Cleveland Only	0.00%	\$0
1986	086135	Water Main, W10th-St Clair Ave	24,261	24,261	1	Cleveland Only	0.00%	\$0
1986	086349	Nottingham, Filter Rehab	1,752	1,752	3	Eastern Suburbs	0.00%	\$0
1986	086382	Warrensville Reservoir	18	18	3	Eastern Suburbs	0.00%	\$0
1986	086398	Broadway Booster Station	2,796,417	2,796,417	3	Eastern Suburbs	0.00%	\$0

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1986	086454	Engle Rd Expansion	1,392	1,392	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086465	Nottingham Capacity Expansion	1,119,227	1,119,227	3	Eastern Suburbs	0.00%	\$0
1986	086474	Division Phase 1 w/Bohen Assoc	0	0	6	Undetermined/Unqualified	0.00%	\$0
1986	086486	Water Main, Bagley Whitney	13,557	13,557	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086492	Water Main, Fulton- Denison	51,202	51,202	2	Western Suburbs	8.40%	\$4,301
1986	086493	Water Main, Fulton-Brecksville	48,150	48,150	2	Western Suburbs	8.40%	\$4,045
1986	086538	Baldwin Scrubber System	655,593	655,593	11	Eastern City and Suburbs	0.00%	\$0
1986	086545	Shepard Road Reservoir Main	18,514	18,514	3	Eastern Suburbs	0.00%	\$0
1986	086546	Private Main Insulation's	146	146	1	Cleveland Only	0.00%	\$0
1986	086547	Contractor Installing Rom's	20,120	20,120	6	Undetermined/Unqualified	0.00%	\$0
1986	086550	Shepard Road Pump/Gen Rehab	15,852	15,852	3	Eastern Suburbs	0.00%	\$0
1986	086551	Engineering Study	3,118	3,118	6	Undetermined/Unqualified	0.00%	\$0
1986	086581	Water Main Detroit-Shoreway	612	612	1	Cleveland Only	0.00%	\$0
1986	086583	Baldwin Heating System Rehab	413,259	413,259	11	Eastern City and Suburbs	0.00%	\$0
1986	086611	Independence Rehab Pum	0	0	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086613	Crown Intake Restoration	22,739	22,739	2	Western Suburbs	8.40%	\$1,910
1986	086615	Nottingham Restore NW System	182,159	182,159	3	Eastern Suburbs	0.00%	\$0
1986	086616	Crown, Restore WW System	134,525	134,525	2	Western Suburbs	8.40%	\$11,300
1986	086617	Computerized Drafting System	11,495	11,495	6	Undetermined/Unqualified	0.00%	\$0
1986	086619	Convert High Pressure System	2,767	2,767	6	Undetermined/Unqualified	0.00%	\$0
1986	086620	Water Main, Woodhill Road	595,383	595,383	11	Eastern City and Suburbs	0.00%	\$0
1986	086629	DPU Building	20,235	20,235	5	Entire System	3.35%	\$677
1986	086631	Water Main , Old River	60,040	60,040	1	Cleveland Only	0.00%	\$0
1986	086638	Relocate 250 of 30 Main E 7	1,277	1,277	1	Cleveland Only	0.00%	\$0
1986	086640	Water Main, Various Culverts	98,840	98,840	6	Undetermined/Unqualified	0.00%	\$0
1986	086642	Crown-Sprague Main Part 2	3,653,992	3,653,992	2	Western Suburbs	8.40%	\$306,943
1986	086645	Water Main, E 88	44,953	44,953	1	Cleveland Only	0.00%	\$0
1986	086646	Replace Tap Sleeve & DIV	4,353	4,353	6	Undetermined/Unqualified	0.00%	\$0
1986	086647	Water Main, Solon- Chagrin	1,273,786	1,273,786	3	Eastern Suburbs	0.00%	\$0
1986	086648	Water Mains, Var 8" & 12 "	1,095,015	1,095,015	1	Cleveland Only	0.00%	\$0
1986	086651	Crown - Sprague Main Part 1	1,705,125	1,705,125	2	Western Suburbs	8.40%	\$143,234
1986	086652	Water Main, Bethel Court	43,646	43,646	1	Cleveland Only	0.00%	\$0
1986	086655	Rehab Bald/Fair Meter System	75,952	75,952	11	Eastern City and Suburbs	0.00%	\$0
1986	086657	DPU Building, Replace Roof	123,664	123,664	5	Entire System	3.35%	\$4,140
1986	086658	Nottingham Interconnect	140,121	140,121	3	Eastern Suburbs	0.00%	\$0
1986	086659	Cleaning & Lining Supply Main	5,894,714	5,894,714	5	Entire System	3.35%	\$197,349
1986	086660	Repair Lorain RD Water Main	145,000	145,000	1	Cleveland Only	0.00%	\$0
1986	086661	Restore Reservoir Tank-Engle	232,250	232,250	2	Western Suburbs	8.40%	\$19,510
1986	086662	Painting Reservoir Tank-Engle	69,680	69,680	2	Western Suburbs	8.40%	\$5,853
1986	086664	Extend & Enclose Door at Pub	11,250	11,250	6	Undetermined/Unqualified	0.00%	\$0
1986	086667	Harborview Drive Water Main	42,574	42,574	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Inch-Mile

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1986	086668	Loading Dock, Fairmount Pump	61,910	61,910	11	Eastern City and Suburbs	0.00%	\$0
1986	086669	Replace Tap Sleeves-Division	277,015	277,015	10	Western City and Suburbs	5.23%	\$14,483
1986	086670	Water Main, Old River Road	275,458	275,458	1	Cleveland Only	0.00%	\$0
1986	086671	Harvard Yard Property Expansion	338,500	338,500	5	Entire System	3.35%	\$11,333
1986	086672	Rehab 60" Raw Water Main	2,593,854	2,593,854	11	Eastern City and Suburbs	0.00%	\$0
1987	087673	Aerial Photo and Surveys	30,086	30,086	5	Entire System	3.35%	\$1,007
1987	087674	Cleaning and Linig Main	4,258,610	4,258,610	1	Cleveland Only	0.00%	\$0
1987	086675	Replace Crown Flocculators	452,688	452,688	2	Western Suburbs	8.40%	\$38,027
1987	086676	East 80 Main replacement	55,457	55,457	1	Cleveland Only	0.00%	\$0
1987	086677	Richmond Ave Main replacement	96,708	96,708	3	Eastern Suburbs	0.00%	\$0
1987	086678	Parma Pump 4e Rehabilitation	105,785	105,785	8	2nd High, PV, and Pearl	0.00%	\$0
1987	086679	Crown-Sprague Main Part 3	1,842,489	1,842,489	2	Western Suburbs	8.40%	\$154,773
1987	086680	E 71 St Main Replacement	142,875	142,875	1	Cleveland Only	0.00%	\$0
1987	086681	Replace Crown Boilers	298,178	298,178	2	Western Suburbs	8.40%	\$25,048
1987	086682	Crown-Sprague Main Sec 1 4A	1,716,853	1,716,853	2	Western Suburbs	8.40%	\$144,219
1987	086683	Crown-Sprague Main Sec 1 4B	2,264,082	2,264,082	2	Western Suburbs	8.40%	\$190,188
1987	086685	West 130 St Main Replacement	145,247	145,247	1	Cleveland Only	0.00%	\$0
1987	086686	Fulton -Brecksville Supply main Sec1	3,007,297	3,007,297	2	Western Suburbs	8.40%	\$252,619
1987	086687	Fulton -Brecksville Supply main Sec1	2,994,824	2,994,824	2	Western Suburbs	8.40%	\$251,572
1987	086688	Brecksville Water supply Main	1,002,587	1,002,587	7	2nd and PV	0.00%	\$0
1987	086689	Oaks/Bdview/Akins Main Sec 1	1,176,383	1,176,383	7	2nd and PV	0.00%	\$0
1987	086690	Oaks/Bdview/Akins Main Sec 2	1,279,007	1,279,007	7	2nd and PV	0.00%	\$0
1987	086691	Brookpark-Dearing Supply Main	5,381,391	5,381,391	2	Western Suburbs	8.40%	\$452,048
1987	086692	Crown Low Service Supply Main	346,964	346,964	2	Western Suburbs	8.40%	\$29,146
1987	086693	Fulton-Denison-Bkpark Supply Main	4,818,473	4,818,473	2	Western Suburbs	8.40%	\$404,762
1987	086694	1989 Cleaning & Lining	5,432,430	5,432,430	5	Entire System	3.35%	\$181,872
1987	086695	Distribution Main Replacement Program	2,480,613	2,480,613	1	Cleveland Only	0.00%	\$0
1987	086696	Division-Fairmount Boiler Replacement	764,904	764,904	5	Entire System	3.35%	\$25,608
1987	086697	Aerial Photo Mapping Survey	323,474	323,474	5	Entire System	3.35%	\$10,830
1988	088800	New Warrensville Pump Station	1,959,145	1,959,145	3	Eastern Suburbs	0.00%	\$0
1988	088801	East 91 st 12" Main Replacement	26,752	26,752	1	Cleveland Only	0.00%	\$0
1988	088802	Crown Plant Neutralization System	102,073	102,073	2	Western Suburbs	8.40%	\$8,574
1988	088803	Division Dam Board Installation	108,112	108,112	10	Western City and Suburbs	5.23%	\$5,652
1988	088805	Rehabilitation Kirtland Raw Mains II	4,919,327	4,919,327	11	Eastern City and Suburbs	0.00%	\$0
1988	51088806	Harvard Yards - Professional Services	1,928,444	1,928,444	5	Entire System	3.35%	\$64,562
1988	088807	Pump Station Battery Installations	43,022	43,022	6	Undetermined/Unqualified	0.00%	\$0
1988	088808	Cook Rd Water Main	311,402	311,402	7	2nd and PV	0.00%	\$0
1988	088809	S. Marginal Road 12" Main	350,559	350,559	1	Cleveland Only	0.00%	\$0
1988	088810	Nottingham St. 2nd HS Improve	5,816,915	5,816,915	3	Eastern Suburbs	0.00%	\$0
1988	088811	Paving Plant Service Roads	1,993,148	1,993,148	1	Cleveland Only	0.00%	\$0
1988	088812	Meter Bldg at Crown Plant	31,393	31,393	2	Western Suburbs	8.40%	\$2,637

Capital Projects Listing - Westlake Allocation by Inch-Mile

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1988	088813	1989 Cleaning & Relining Program	9,697,620	9,697,620	5	Entire System	3.35%	\$324,667
1988	088815	Install Cathod Protect Sys	245,110	245,110	5	Entire System	3.35%	\$8,206
1988	088816	Replace Valves - Kinsman Tank	366,531	366,531	3	Eastern Suburbs	0.00%	\$0
1988	088817	Interconnect Line - Fairmount	141,943	141,943	3	Eastern Suburbs	0.00%	\$0
1988	088818	Highland / Richmond Sec 2 &	993,970	993,970	3	Eastern Suburbs	0.00%	\$0
1988	088819	Rehab Plans for Filters	6,875,671	6,875,671	3	Eastern Suburbs	0.00%	\$0
1988	088820	Rehab Kirtland Intake Crib	2,314,233	2,314,233	11	Eastern City and Suburbs	0.00%	\$0
1988	51088821	Baldwin Filter Control Valves	936,203	936,203	11	Eastern City and Suburbs	0.00%	\$0
1988	088822	Dist Main Replacement Program II	150,363	150,363	1	Cleveland Only	0.00%	\$0
1989	51089900	Reline Liquid Alum Tanks	198,990	198,990	6	Undetermined/Unqualified	0.00%	\$0
1989	51089901	E. Aurora Rd. 16" Water Main	194,624	194,624	3	Eastern Suburbs	0.00%	\$0
1989	51089902	Remove/Replace PCB Capacitor	288,163	288,163	6	Undetermined/Unqualified	0.00%	\$0
1989	51089903	Parma Control Ctr Renovation	7,432,481	7,432,481	5	Entire System	3.35%	\$248,832
1989	51089904	Harvard Yards - Construction	31,244,542	31,244,542	5	Entire System	3.35%	\$1,046,036
1989	51089905	Darrow Rd Tower Replacement	2,977,132	2,977,132	3	Eastern Suburbs	0.00%	\$0
1989	51089906	Pettibone Rd 24" Supply Main	188,408	188,408	3	Eastern Suburbs	0.00%	\$0
1989	51089907	Rehab Kirtland Raw Main III	5,207,648	5,207,648	3	Eastern Suburbs	0.00%	\$0
1989	51089908	Repair Twin Conduit at Division	638,443	638,443	10	Western City and Suburbs	5.23%	\$33,380
1989	51089909	Parma Pump Station Expansion-Engineering	530,860	530,860	8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089910	Land Acquis - N Royalton	2,497	2,497	9	PV and Pearl	0.00%	\$0
1989	51089911	Parma Pump Stat Expansion	4,111,345	4,111,345	8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089912	Parma Pearl Express Main	9,628,516	9,628,516	8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	1- Pearl York Phase I, II, & III design			8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	2- Pearl York Phase I			8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	3- Pearl York Phase II			8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	4- Pearl York Phase III			8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089913	Nottingham Control Valves	2,605	2,605	3	Eastern Suburbs	0.00%	\$0
1989	51089914	Engle Road Pump Station	6,910,202	6,910,202	8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089915	Univ Hosp Main Improvements	674,065	674,065	1	Cleveland Only	0.00%	\$0
1990	51090920	1990 Cleaning & Relining Program	8,166,415	8,166,415	5	Entire System	3.35%	\$273,403
1990	51090921	Cochran Harper Road 2nd & 3rd	3,834,555	3,834,555	3	Eastern Suburbs	0.00%	\$0
1990	51090922	Bennett Road 3rd High Supply	4,413	4,413	4	Pearl Only	0.00%	\$0
1990	51090923	W. Shoreway 42" / 36" Relocation	1,740	1,740	1	Cleveland Only	0.00%	\$0
1990	51090924	Division - Northfield Roof Imp	38,321	38,321	6	Undetermined/Unqualified	0.00%	\$0
1990	51090925	Battery/ Charger System Update	91,632	91,632	6	Undetermined/Unqualified	0.00%	\$0
1990	51090926	Main Station Site Improvements	3,580,412	3,580,412	5	Entire System	3.35%	\$119,869
1990	51090927	Fairmount-Warrens ville Supply Main	25,189,067	25,189,067	3	Eastern Suburbs	0.00%	\$0
1990	51090928	Aerial Photo / Mapping Project	20,685	20,685	5	Entire System	3.35%	\$693
1990	51090930	Clean & Reline Trunk Mains 9	5,675,529	5,675,529	5	Entire System	3.35%	\$190,011
1990	51090931	Division Surge Tank Insulation	83,930	83,930	10	Western City and Suburbs	5.23%	\$4,388
1990	51090932	Chlorine Detection Systems	70,371	70,371	5	Entire System	3.35%	\$2,356

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1990	51090933	South Twinsburg Tower & Supply Mains	8,735,808	8,735,808	3	Eastern Suburbs	0.00%	\$0
1990	51090934	Baldwin Chlorine Feed System	105,986	105,986	11	Eastern City and Suburbs	0.00%	\$0
1990	51090935	Broadway System Expansion	558,576	558,576	3	Eastern Suburbs	0.00%	\$0
1990	51090936	Baldwin Voltage Cabling System	134,926	134,926	11	Eastern City and Suburbs	0.00%	\$0
1990	51090937	Paint Dover & Brecksville Towers	621,700	621,700	2	Western Suburbs	8.40%	\$52,224
1990	51090938	1991 Cleaning & Relining Main Program	5,196,976	5,196,976	1	Cleveland Only	0.00%	\$0
1991	51091939	Aurora / Bainbridge 36" Main	311,682	311,682	3	Eastern Suburbs	0.00%	\$0
1991	51091940	Liberty-Darrow Water Supply	4,942,739	4,942,739	3	Eastern Suburbs	0.00%	\$0
1991	51091941	PCB Removal at Nottingham	493,576	493,576	3	Eastern Suburbs	0.00%	\$0
1991	51091942	Relining Trunk Mains 91/92	2,329,700	2,329,700	5	Entire System	3.35%	\$77,996
1991	51091943	Repair Nott: Backwash Piping	1,078,095	1,078,095	3	Eastern Suburbs	0.00%	\$0
1991	51091944	Broadway Pump Station Expans	112,527	112,527	3	Eastern Suburbs	0.00%	\$0
1991	51091945	Replace Various Water Mains	2,864,343	2,864,343	6	Undetermined/Unqualified	0.00%	\$0
1991	51091946	Crown Plant Roof Replacement	197,540	197,540	2	Western Suburbs	8.40%	\$16,594
1991	51091947	Baldwin Switchgear Replacement	10,692	10,692	11	Eastern City and Suburbs	0.00%	\$0
1991	51091948	Nottingham Flocculator Replacement	1,045,872	1,045,872	3	Eastern Suburbs	0.00%	\$0
1991	51091949	Baldwin Electrical Renovation	6,595	6,595	11	Eastern City and Suburbs	0.00%	\$0
1991	51091950	Telecommunications Systems	738,144	738,144	5	Entire System	3.35%	\$24,712
1991	51091951	1992 Cleaning & Lining Program	5,160,808	5,160,808	1	Cleveland Only	0.00%	\$0
1991	51091952	Crown Plant Drainage & Rehab	586,172	586,172	2	Western Suburbs	8.40%	\$49,240
1991	51091953	Rehab Trav Water Screens 4	2,297,279	2,297,279	6	Undetermined/Unqualified	0.00%	\$0
1991	51091954	Hadden Pump Station Property Acquisition	50,992	50,992	3	Eastern Suburbs	0.00%	\$0
1991	51091955	Crown Plant Expansion Prof Sys	18,687,244	18,687,244	2	Western Suburbs	8.40%	\$1,569,769
1992	51092960	800 MHz Radio System-Professional Services	2,515,505	2,515,505	6	Undetermined/Unqualified	0.00%	\$0
1992	51092961	Cathodic Protection - Kirtland	1,112,107	1,112,107	11	Eastern City and Suburbs	0.00%	\$0
1992	51092962	Clean & Line Highland Road	684,812	684,812	3	Eastern Suburbs	0.00%	\$0
1992	51092963	Computer Network System	144,227	144,227	6	Undetermined/Unqualified	0.00%	\$0
1992	51092964	Fairmount Asbestos	320,263	320,263	11	Eastern City and Suburbs	0.00%	\$0
1992	51092965	Morgan Pump Bldg Renovation	1,987,804	1,987,804	10	Western City and Suburbs	5.23%	\$103,929
1992	51092966	Clean & Line Trunk Mains 92	2,144,542	2,144,542	5	Entire System	3.35%	\$71,797
1992	51092967	Circulation Main - W. 117 St./Long	58,775	58,775	1	Cleveland Only	0.00%	\$0
1992	51092968	800 MHz Radio System-Construction	21,606,944	21,606,944	6	Undetermined/Unqualified	0.00%	\$0
1992	51092969	Warrensville - Broadway Supply Main	12,046,541	12,046,541	3	Eastern Suburbs	0.00%	\$0
1992	51092970	Bedford Rd Water Supply Main	2,208,574	2,208,574	3	Eastern Suburbs	0.00%	\$0
1992	51092971	Aurora-Solon Supply Main	2,427,047	2,427,047	3	Eastern Suburbs	0.00%	\$0
1992	51092972	Aurora Rd. Supply Main	7,759,618	7,759,618	3	Eastern Suburbs	0.00%	\$0
1992	51092973	Renovate 1201 & 1825 Lakeside Ave	19,495,217	19,495,217	5	Entire System	3.35%	\$652,680
1992	51092974	North Royalton Pump Station & Tank	21,234,486	21,234,486	9	PV and Pearl	0.00%	\$0
1992	51092975	G Morgan Surge Tank - Painting	149,100	149,100	10	Western City and Suburbs	5.23%	\$7,795
1992	51092976	Fairmount/Baldwin Structural Rehab	123,636	123,636	11	Eastern City and Suburbs	0.00%	\$0
1992	51092977	Nottingham Low/1st High Pump Rehab	4,689,316	4,689,316	3	Eastern Suburbs	0.00%	\$0

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Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1992	51092978	Clean & Line Trunk Mains 199	5,077,214	5,077,214	5	Entire System	3.35%	\$169,980
1992	51092979	Nottingham Roof Rehab	574,811	574,811	3	Eastern Suburbs	0.00%	\$0
1992	51092980	Site Improvements Secondary Stations	646,235	646,235	5	Entire System	3.35%	\$21,635
1993	51093200	GIS - Professional Services	773,576	773,576	5	Entire System	3.35%	\$25,899
1993	51093201	Computer System Integrator Sys	3,069,663	3,069,663	5	Entire System	3.35%	\$102,769
1993	51093202	Citywide Fire Hydrant Replacement	0	0	1	Cleveland Only	0.00%	\$0
1993	51093203	Cleaning & Lining 1994	4,604,579	4,604,579	1	Cleveland Only	0.00%	\$0
1993	51093204	Church Square Water Improvement	236,613	236,613	1	Cleveland Only	0.00%	\$0
1993	51093205	Baldwin Waterworks Rehab	4,594,619	4,594,619	11	Eastern City and Suburbs	0.00%	\$0
1993	51093981	Euclid Creek Erosion Control	259,156	259,156	3	Eastern Suburbs	0.00%	\$0
1993	51093982	Clean & Line Trunk Mains 93/	3,841,421	3,841,421	5	Entire System	3.35%	\$128,607
1993	51093983	Electronic Alarms for Stations	383,468	383,468	5	Entire System	3.35%	\$12,838
1993	51093984	Baldwin Reservoir Rehabilitation	4,498,999	4,498,999	11	Eastern City and Suburbs	0.00%	\$0
1993	51093985	Crown Expansion - Construction	112,004,390	112,004,390	2	Western Suburbs	8.40%	\$9,408,610
1993	51093986	Warrensville Reservoir Painting	1,401,528	1,401,528	3	Eastern Suburbs	0.00%	\$0
1993	51093987	New Hadden Pump Station	4,087,253	4,087,253	3	Eastern Suburbs	0.00%	\$0
1993	51093988	Chemical Feed Systems-All Plants	374,219	374,219	5	Entire System	3.35%	\$12,528
1993	51093989	Catholic Protection Program	2,187,736	2,187,736	5	Entire System	3.35%	\$73,243
1993	51093990	Southwest Quadrant Trunk Mains	16,765,040		2	Western Suburbs	8.40%	\$0
	51093990	1- Bennett West 130 Main (Design & Construction, ODOT)		634,200	4	Pearl Only	0.00%	\$0
	51093990	2- Pearl York Phase IV design		378,003	8	2nd High, PV, and Pearl	0.00%	\$0
	51093990	3- Pearl York Phase IV Construction		2,889,344	8	2nd High, PV, and Pearl	0.00%	\$0
	51093990	4- North Royalton Discharge Main Design		696,625	9	PV and Pearl	0.00%	\$0
	51093990	5- North Royalton Akins Phase II Construction		1,333,517	7	2nd and PV	0.00%	\$0
	51093990	6.a- North Royalton Bennett Phase II (2.97 miles)		4,795,163	4	Pearl Only	0.00%	\$0
	51093990	6.b- North Royalton Broadview, Phase I (0.27 miles)		476,463	7	2nd and PV	0.00%	\$0
	51093990	7- Engle Main (City of Middleburg Heights)		3,017,090	8	2nd High, PV, and Pearl	0.00%	\$0
	51093990	8- Sheldon Main Design		387,176	2	Western Suburbs	8.40%	\$32,524
	51093990	9- Sheldon Main Construction		2,529,972	2	Western Suburbs	8.40%	\$212,523
1993	51093991	Environmental Assessment	941,792	941,792	6	Undetermined/Unqualified	0.00%	\$0
1993	51093992	SCADA System Enhancements	1,342,071	1,342,071	5	Entire System	3.35%	\$44,931
1993	51093993	Garrett Morgan Reservoir	4,505	4,505	6	Undetermined/Unqualified	0.00%	\$0
1993	51093995	Garrett Morgan Excitor Modification	192,687	192,687	2	Western Suburbs	8.40%	\$16,186
1993	51093996	Nottingham Reservoir Basin Improvements	7,262	7,262	3	Eastern Suburbs	0.00%	\$0
1993	51093997	West 117th Street Water Main	1,788,850	1,788,850	1	Cleveland Only	0.00%	\$0
1993	51093998	EPA Plant Modification Studies	81	81	6	Undetermined/Unqualified	0.00%	\$0
1994	51094206	Garrett Morgan - Reservoir Enhancements	789,306	789,306	2	Western Suburbs	8.40%	\$66,303
1994	51094207	Curtis Wright Parkway/Bishop	134,049	134,049	3	Eastern Suburbs	0.00%	\$0
1994	51094209	Cleaning & Relining Trunk Mains	2,638,696	2,638,696	5	Entire System	3.35%	\$88,341
1994	51094210	Nottingham Stack Repair / Repl	162,343	162,343	3	Eastern Suburbs	0.00%	\$0
1994	51094211	1995 Cleaning/Lining Dist Mains	4,317,482	4,317,482	1	Cleveland Only	0.00%	\$0

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1994	51094212	1995 Catholic Protection Program	174,412	174,412	5	Entire System	3.35%	\$5,839
1994	51094213	Information Architecture	579,583	579,583	6	Undetermined/Unqualified	0.00%	\$0
1995	51095217	95/96 Trunk Main Cleaning & Lining	4,033,506	4,033,506	5	Entire System	3.35%	\$135,038
1995	51095218	Mayfield Rd. Water Main	2,026,062	2,026,062	3	Eastern Suburbs	0.00%	\$0
1995	51095219	CIP Professional Services Testing	753,400	753,400	5	Entire System	3.35%	\$25,223
1995	51095220	1996 Distribution Main Clean	5,628,553	5,628,553	1	Cleveland Only	0.00%	\$0
1995	51095221	Prospect Avenue Repairs	525,339	525,339	1	Cleveland Only	0.00%	\$0
1995	51095222	PEP - Crown	3,759,206	3,759,206	2	Western Suburbs	8.40%	\$315,781
1995	51095223	PEP - Morgan	11,595,475	11,595,475	2	Western Suburbs	8.40%	\$974,045
1995	51095224	PEP - Baldwin	5,904,526	5,904,526	11	Eastern City and Suburbs	0.00%	\$0
1995	51095225	PEP - Nottingham	5,157,598	5,157,598	3	Eastern Suburbs	0.00%	\$0
1995	51095226	West 9th Street/Old River Road	271,832	271,832	1	Cleveland Only	0.00%	\$0
1995	51095227	Franklin Boulevard	385,000	385,000	1	Cleveland Only	0.00%	\$0
1996	51096228	1996 Water Tower Painting Program	1,252,448	1,252,448	5	Entire System	3.35%	\$41,931
1996	51096229	Mill Creek Subdivision	356,744	356,744	1	Cleveland Only	0.00%	\$0
1996	51096230	Harvard Avenue Bridge Water Main	166,152	166,152	5	Entire System	3.35%	\$5,563
1996	51096231	West 85th Street	460,627	460,627	1	Cleveland Only	0.00%	\$0
1996	51096232	Water Tank Inspection Program	140,148	140,148	5	Entire System	3.35%	\$4,692
1996	51096233	Palma Reservoir Rehab	8,287,388	8,287,388	2	Western Suburbs	8.40%	\$696,158
1996	51096234	Kirtland Pump Station Transfer	130,154	130,154	11	Eastern City and Suburbs	0.00%	\$0
1996	51096235	Darrow Road Supply Main - Phase	13,067	13,067	3	Eastern Suburbs	0.00%	\$0
1996	51096236	1440 Lakeside Feasibility Study	63,803	63,803	1	Cleveland Only	0.00%	\$0
1996	51096237	Spring Road Water Main	189,154	189,154	1	Cleveland Only	0.00%	\$0
1996	51096238	1996/1997 Trunk Main Cleaning & Lining	2,851,756	2,851,756	5	Entire System	3.35%	\$95,474
1996	51096239	Kinsman-Green Supply Main	2,075,955	2,075,955	3	Eastern Suburbs	0.00%	\$0
1996	51096940	Broadview Road Pump Station	102	102	7	2nd and PV	0.00%	\$0
1996	51096241	Cleaning & Lining Distribution Mains	4,096,451	4,096,451	1	Cleveland Only	0.00%	\$0
1996	51096242	Demolish Various Non-Operative Stations	1,124,674	1,124,674	6	Undetermined/Unqualified	0.00%	\$0
1996	51096245	Central Commons 5 & 6	163,408	163,408	1	Cleveland Only	0.00%	\$0
1996	51096246	Kingbury at Herron Row	120,904	120,904	1	Cleveland Only	0.00%	\$0
1996	w96247	City-Wide GIS	35,509,886	35,509,886	5	Entire System	3.35%	\$1,188,835
1996	51096248	Fencing Site Improvements	0	0	6	Undetermined/Unqualified	0.00%	\$0
1997	51097250	East 79th Street	0	0	1	Cleveland Only	0.00%	\$0
1997	51097251	Fulton Road	33,680	33,680	1	Cleveland Only	0.00%	\$0
1997	51097252	Eddy Road	0	0	1	Cleveland Only	0.00%	\$0
1997	51097253	Hough Ave.	31,280	31,280	1	Cleveland Only	0.00%	\$0
1997	51097254	Hand Held Meter Reading System	1,862,704	1,862,704	5	Entire System	3.35%	\$62,361
1997	51097255	Distribution System Hydraulic Model	4,971,352	4,971,352	5	Entire System	3.35%	\$166,436
1997	51097256	Cornell Road	36,540	36,540	1	Cleveland Only	0.00%	\$0
1997	51097257	East 40th Street	3,750	3,750	1	Cleveland Only	0.00%	\$0
1997	51097258	Aetna Road	694,286	694,286	1	Cleveland Only	0.00%	\$0

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1997	51097259	Bessemer Ave. (E.65th - E.88th)	38,982	38,982	1	Cleveland Only	0.00%	\$0
1997	51097260	E. 55th St. - Phase I	129,137	129,137	1	Cleveland Only	0.00%	\$0
1997	51097261	East 200th Street	0	0	1	Cleveland Only	0.00%	\$0
1997	51097262	E. 123rd, Arlington & E. 125th	114,173	114,173	1	Cleveland Only	0.00%	\$0
1997	51097263	Cleaning & Lining Distribution Mains	5,796,505	5,796,505	1	Cleveland Only	0.00%	\$0
1997	w97264	PEP Phase I - Design	72,604,503	70,898,446	5	Entire System	3.35%	\$2,373,609
1997	51097266	Nottingham Pump Header Rehab	0	0	3	Eastern Suburbs	0.00%	\$0
1997	51097267	Nottingham Boiler Replacement	568,433	568,433	3	Eastern Suburbs	0.00%	\$0
1997	51097268	Water Vehicles - 1997	2,122,364	2,122,364	6	Undetermined/Unqualified	0.00%	\$0
1998	51098271	Kinsman Water Tower Rehabilitation	2,771,462	2,771,462	3	Eastern Suburbs	0.00%	\$0
1998	51098272	Clean & Line Distribution Mains - 1999	4,661,095	4,661,095	1	Cleveland Only	0.00%	\$0
1998	51098273	Rosewood Avenue	96,800	96,800	1	Cleveland Only	0.00%	\$0
1998	51098274	Dale Avenue	0	0	1	Cleveland Only	0.00%	\$0
1998	51098275	West Superior Road Water Main	505,988	505,988	1	Cleveland Only	0.00%	\$0
1998	51098276	Cost of Issuance - Series I Bonds	788,721	788,721	5	Entire System	3.35%	\$26,406
1998	51098277	Tower Painting and Maintenance	12,523,813	12,523,813	5	Entire System	3.35%	\$419,285
1998	51098278	Trunk Main Cleaning & Lining - Area 98-T2	1,553,255	1,553,255	5	Entire System	3.35%	\$52,001
1998	51098279	New Generator for Pearl Road Pump Station	0	0	4	Pearl Only	0.00%	\$0
1998	51098280	Water Vehicles - 1998	2,226,506	2,226,506	6	Undetermined/Unqualified	0.00%	\$0
1999	51099281	Brookpark Water Main Relocation	254,333	254,333	2	Western Suburbs	8.40%	\$21,364
1999	51099282	Chlorine Ton Cylinder Handling	296,175	296,175	5	Entire System	3.35%	\$9,916
1999	51099283	Lee Road Rehabilitation	230,071	230,071	1	Cleveland Only	0.00%	\$0
1999	51099284	Cleveland Business Park West	496,447	496,447	1	Cleveland Only	0.00%	\$0
1999	51099285	Orchard Park Housing Development	341,914	341,914	1	Cleveland Only	0.00%	\$0
1999	51099286	Euclid Creek Erosion	608,680	608,680	3	Eastern Suburbs	0.00%	\$0
1999	51099287	Replace Water Pump Impellers	0	0	6	Undetermined/Unqualified	0.00%	\$0
1999	51099288	Repair Ball Valve for Pump	0	0	6	Undetermined/Unqualified	0.00%	\$0
1999	51099289	East 55th Street - Phase II	13,685	13,685	1	Cleveland Only	0.00%	\$0
1999	51099290	East 40th Street - Phase III	40,855	40,855	1	Cleveland Only	0.00%	\$0
1999	51099291	East 55th Street - Phase III	57,370	57,370	1	Cleveland Only	0.00%	\$0
1999	51099292	Water Vehicles - 1999	1,671,404	1,671,404	6	Undetermined/Unqualified	0.00%	\$0
2000	51000300	Renovation at Charles Carr Municipal Center	1,248	1,248	1	Cleveland Only	0.00%	\$0
2000	51000301	Clean & Line Water Mains - 2000	5,557,296	5,557,296	1	Cleveland Only	0.00%	\$0
2000	51000302	Denison Ave. Bridge - 12" & 30" Water Mains	280,000	280,000	10	Western City and Suburbs	5.23%	\$14,639
2000	51000303	Replace Pump Units at Crown & Morgan	0	0	2	Western Suburbs	8.40%	\$0
2000	51000304	Water Main Repairs Specials	0	0	5	Entire System	3.35%	\$0
2000	51000305	Filter Turbidimeters & Particle Counters	0	0	5	Entire System	3.35%	\$0
2000	51000306	E. 40th Street - Phase II	0	0	1	Cleveland Only	0.00%	\$0
2000	w00310	Morgan Pump Station	46,823,702	46,823,702	10	Western City and Suburbs	5.23%	\$2,448,094
2000	51000311	Baldwin Filter Improvements	34,124,902	34,124,902	11	Eastern City and Suburbs	0.00%	\$0
2000	51000312	Nottingham Filter Improvements	23,530,126	23,530,126	11	Eastern City and Suburbs	0.00%	\$0

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2000	51000313	Rehab E. 110 St.	29,128	29,128	1	Cleveland Only	0.00%	\$0
2000	51000314	Rehab W. 110 St.	13,421	13,421	1	Cleveland Only	0.00%	\$0
2000	51000315	E. 40th Street Phase III	0	0	1	Cleveland Only	0.00%	\$0
2000	51000316	Kirtland Intake Crib Painting	672,860	672,860	11	Eastern City and Suburbs	0.00%	\$0
2000	51000318	W. 22 St. & W. 23 St	0	0	1	Cleveland Only	0.00%	\$0
2000	51000319	Rowley Ave. Sewer - W. 14 to W. 17	16,687	16,687	1	Cleveland Only	0.00%	\$0
2000	51000320	Water Main Rehab - 2001	6,434,559	6,434,559	1	Cleveland Only	0.00%	\$0
2000	51000325	Water Vehicles - 2000	1,904,498	1,904,498	6	Undetermined/Unqualified	0.00%	\$0
2000	51000326	Euclid Corridor - Water Main Replacement	17,160,355	17,160,355	1	Cleveland Only	0.00%	\$0
2001	51001330	Garrett Morgan Museum	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001331	Naples Ave.-E. 153 St.-West End	0	0	1	Cleveland Only	0.00%	\$0
2001	51001332	State Road	49,300	49,300	1	Cleveland Only	0.00%	\$0
2001	51001333	Longwood Apartments	828,410	828,410	1	Cleveland Only	0.00%	\$0
2001	51001336	Water Main Specials	4,203,931	4,203,931	5	Entire System	3.35%	\$140,743
2001	51001337	South Water Mains (Design)	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001339	Kirtland's Motor Rewiring	0	0	11	Eastern City and Suburbs	0.00%	\$0
2001	51001340	Impellers & Associated Items (Crown/Morgan)	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001341	Repair Morgan Rapid Mix Sluice Gate	163,803	163,803	10	Western City and Suburbs	5.23%	\$8,564
2001	51001343	Repair of Crown Sludge Dome	91,500	91,500	2	Western Suburbs	8.40%	\$7,686
2001	51001344	Residuals Handling System @ Garrett Morgan	0	0	10	Western City and Suburbs	5.23%	\$0
2001	51001345	Engineering/Environmental Consulting	164,311	164,311	6	Undetermined/Unqualified	0.00%	\$0
2001	51001346	Central Ave. Rehab Project	23,115	23,115	1	Cleveland Only	0.00%	\$0
2001	51001347	E. 79th St. Rehabilitation Project	43,181	43,181	1	Cleveland Only	0.00%	\$0
2001	51001348	West 159th St. & Melbourne Sewer	12,693	12,693	1	Cleveland Only	0.00%	\$0
2001	51001349	West 31st St. Reconstruction	86,097	86,097	1	Cleveland Only	0.00%	\$0
2001	51001351	Watermain Rehab for Year 2002	6,692,124	6,692,124	1	Cleveland Only	0.00%	\$0
2001	51001352	Nottingham Chemical Project	20,522,522	20,522,522	3	Eastern Suburbs	0.00%	\$0
2001	51001353	Crown Residuals Press Rehab	1,288,020	1,288,020	2	Western Suburbs	8.40%	\$108,196
2001	51001501	Equipment for Distribution Mains	273,000	273,000	5	Entire System	3.35%	\$9,140
2001	51001502	Varian Gas Chromatograph & Accessories	73,028	73,028	6	Undetermined/Unqualified	0.00%	\$0
2001	51001503	Spechtrometer and Accessories	87,709	87,709	5	Entire System	3.35%	\$2,936
2001	51001504	Distribution System Instruments	72,309	72,309	5	Entire System	3.35%	\$2,421
2001	51001505	Manual Hand Chain Hoist	3,988	3,988	6	Undetermined/Unqualified	0.00%	\$0
2001	51001506	Motor Rewind Unit- Crown Plant	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001507	Ideal Motor Unit-Morgan Plant	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001508	HP Color Laser Jet Printer	5,300	5,300	6	Undetermined/Unqualified	0.00%	\$0
2001	51001509	Twin Roll Automatic Plain Paper	9,995	9,995	6	Undetermined/Unqualified	0.00%	\$0
2001	51001510	Electric Scissor Lift	9,100	9,100	6	Undetermined/Unqualified	0.00%	\$0
2001	51001511	Acer Milling Machine	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001513	Mueller D-5 Tap Machine	3,360	3,360	6	Undetermined/Unqualified	0.00%	\$0
2001	51001514	Computer Hardware	315,727	315,727	6	Undetermined/Unqualified	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Inch-Mile

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2001	51001515	Vehicles first responder program	89,163	89,163	6	Undetermined/Unqualified	0.00%	\$0
2001	51001516	2001 Motorized & Off Road Equipment	2,344,789	2,344,789	6	Undetermined/Unqualified	0.00%	\$0
2001	51001517	LAN Installation	0	0	5	Entire System	3.35%	\$0
2001	51001518	Installation & Testing LAN	785,756	785,756	5	Entire System	3.35%	\$26,306
2001	51001519	Yard Sweeper	42,704	42,704	6	Undetermined/Unqualified	0.00%	\$0
2001	w01520	Configuring, Monitoring, Troubleshooting	366,029	366,029	5	Entire System	3.35%	\$12,254
2001	51001521	Departmental Software CWD/CPP	597,089	597,089	6	Undetermined/Unqualified	0.00%	\$0
2001		Require K, Repair/Replacement SCADA	1,244,691	1,244,691	5	Entire System	3.35%	\$41,671
2001	51001523	Water Meter Testing Lab Improvements	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001524	Computer Hardware for Water	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001525	Fairmount Pump Station Motor	0	0	11	Eastern City and Suburbs	0.00%	\$0
2001	51001526	CWD Telephone System	0	0	6	Undetermined/Unqualified	0.00%	\$0
2002	51002360	Kinsman Road	1,349,616	1,349,616	1	Cleveland Only	0.00%	\$0
2002	51002361	Western Avenue	166,619	166,619	1	Cleveland Only	0.00%	\$0
2002	51002363	Fairway Ave. Sewer Project	0	0	1	Cleveland Only	0.00%	\$0
2002	w02364	Security Contracts Professional Services	32,456,453	32,254,897	5	Entire System	3.35%	\$1,079,862
2002	51002365	Kirtland Crib Navigation Rehab	0	0	11	Eastern City and Suburbs	0.00%	\$0
2002	51002366	Water Tank Inspection Cycle E	87,091	87,091	6	Undetermined/Unqualified	0.00%	\$0
2002	51002367	Chlorine Monitors	0	0	6	Undetermined/Unqualified	0.00%	\$0
2002	51002368	Floor Crack Repair	0	0	1	Cleveland Only	0.00%	\$0
2002	51002370	Baldwin Chemical Project	29,760,868	29,760,868	11	Eastern City and Suburbs	0.00%	\$0
2002	51002371	Taft Ave. Sewer Replacement	87,564	87,564	1	Cleveland Only	0.00%	\$0
2002	51002372	General Engineering Services	1,947,386	1,947,386	6	Undetermined/Unqualified	0.00%	\$0
2002	51002373	Hurston Court Water Main	130,000	130,000	1	Cleveland Only	0.00%	\$0
2002	51002375	Water Main Rehab for 2003	5,487,570	5,487,570	1	Cleveland Only	0.00%	\$0
2002	w02376	Roof Repair and Replacement	4,855,000	4,492,797	5	Entire System	3.35%	\$150,414
2002	51002377	Rockwell Ave. Water Main	374,429	374,429	1	Cleveland Only	0.00%	\$0
2002	w02380	PEP Program Management Phase II	30,452,555	30,452,542	5	Entire System	3.35%	\$1,019,521
2002	51002530	Financial Information Budget Software	750,749	750,749	5	Entire System	3.35%	\$25,134
2002	w02531	Electronic Document Management System	1,036,415	1,003,415	5	Entire System	3.35%	\$33,593
2002	w02532	Work Management System	5,397,062	5,397,062	5	Entire System	3.35%	\$180,688
2002	w02533	Computer Hardware Peripherals	5,837,610	5,836,071	6	Undetermined/Unqualified	0.00%	\$0
2002	51002534	Off Road Motorized Equipment	30,168	30,168	6	Undetermined/Unqualified	0.00%	\$0
2002	51002535	Vehicles 2002	2,559,875	2,559,875	6	Undetermined/Unqualified	0.00%	\$0
2003	51003385	Carver Park Estates	193,922	193,922	1	Cleveland Only	0.00%	\$0
2003	51003386	Grayton Road/Puritas Ave.	56,729	56,729	1	Cleveland Only	0.00%	\$0
2003	51003387	Euclid Ave.	345,614	345,614	1	Cleveland Only	0.00%	\$0
2003	51003388	Westpark Ave./Lydian Ave. Sewer	247,708	247,708	1	Cleveland Only	0.00%	\$0
2003	51003389	Baldwin 500K Solar Power System	0	0	11	Eastern City and Suburbs	0.00%	\$0
2003	51003390	Memphis Ave. Rehab	100,000	100,000	1	Cleveland Only	0.00%	\$0
2003	51003392	West 105th Street	181,400	181,400	1	Cleveland Only	0.00%	\$0

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2003	51003393	Arbor Park Village Ph. II	120,000	120,000	1	Cleveland Only	0.00%	\$0
2003	w03400	Secondary Station Re-Chlorination	590,407	590,407	6	Undetermined/Unqualified	0.00%	\$0
2003	51003401	Cleveland Business Park West W.M.	113,345	113,345	1	Cleveland Only	0.00%	\$0
2003	51003402	Mobile De-Chlorinating Unit	0	0	6	Undetermined/Unqualified	0.00%	\$0
2003	51003405	Water Main Rehab	6,175,763	6,175,763	1	Cleveland Only	0.00%	\$0
2003	51003406	UPS 1201 Lakeside	98,325	98,325	6	Undetermined/Unqualified	0.00%	\$0
2003	51003407	Denison Ave. Water Main Replacement	1,313,653	1,313,653	1	Cleveland Only	0.00%	\$0
2003	51003540	Vehicles 2003	964,185	964,185	6	Undetermined/Unqualified	0.00%	\$0
2003	51003541	Oracle Software License Fees	1,199,932	1,199,932	6	Undetermined/Unqualified	0.00%	\$0
2003	51003545	AMR Firefly Pilot Demonstration	200,000	200,000	6	Undetermined/Unqualified	0.00%	\$0
2003	51003546	System 311	100,000	100,000	6	Undetermined/Unqualified	0.00%	\$0
2003	w03559	CIS Assessment/Design & Implementation	36,300,965	34,640,205	5	Entire System	3.35%	\$1,159,719
2003	w03560	Datamatic Hardware & Software	864,510	864,510	5	Entire System	3.35%	\$28,943
2003	w03563	Various Engineering Prof. Services	781,857	781,857	6	Undetermined/Unqualified	0.00%	\$0
2003	w03565	Voice and Data	5,858,118	5,858,118	6	Undetermined/Unqualified	0.00%	\$0
2004	51004410	SCADA System	0	0	6	Undetermined/Unqualified	0.00%	\$0
2004	51004411	Berea Rd. (Triskett to Detroit)	690,190	690,190	1	Cleveland Only	0.00%	\$0
2004	51004412	Arbor Park Village Ph. III	0	0	1	Cleveland Only	0.00%	\$0
2004	51004413	S. Waterloo Rd.	10,129	10,129	1	Cleveland Only	0.00%	\$0
2004	51004414	Eat 93rd St. Miles Ave. Union	112,102	112,102	1	Cleveland Only	0.00%	\$0
2004	w04415	Nottingham Floc/Sed/Residuals	23,104,967	23,104,967	3	Eastern Suburbs	0.00%	\$0
2004	w04416	Pump & Motor Impellers - Various Stations	359,179	359,179	5	Entire System	3.35%	\$12,025
2004	51004417	Electrical Power Reliability	24,192,454	24,192,454	5	Entire System	3.35%	\$809,939
2004	51004418	Valley Road	251,394	251,394	1	Cleveland Only	0.00%	\$0
2004	w04420	General Engineering Services	3,704,381	3,704,381	6	Undetermined/Unqualified	0.00%	\$0
2004	51004421	Nottingham Backwash Clarifier	7,222,367	7,222,367	3	Eastern Suburbs	0.00%	\$0
2004	51004422	Brunswick System Improvements	3,250,000	3,250,000	4	Pearl Only	0.00%	\$0
2004	51004423	East 4th Street	55,000	55,000	1	Cleveland Only	0.00%	\$0
2004	51004425	Water Main Rehab 2005	6,151,459	6,151,459	1	Cleveland Only	0.00%	\$0
2004	51004427	Harvard Yards Building Improvements	1,387,713	1,387,713	5	Entire System	3.35%	\$46,459
2004	w04428	Water Plant Valves	168,196	168,196	5	Entire System	3.35%	\$5,631
2004	w04429	Nottingham Administration Building	5,047,445	4,976,450	3	Eastern Suburbs	0.00%	\$0
2004	w04430	Baldwin Rapid Mix	27,162,387	27,162,387	11	Eastern City and Suburbs	0.00%	\$0
2004	w04431	East 176th Street	0	0	1	Cleveland Only	0.00%	\$0
2004	w04570	Monitoring Capital Projects	1,309,710	1,217,335	5	Entire System	3.35%	\$40,755
2004	51004571	Network Back-Up at 205 St. Clair	960,300	960,300	5	Entire System	3.35%	\$32,150
2004	w04572	Switchgear & Motor Control Repairs	470,289	470,289	5	Entire System	3.35%	\$15,745
2004	w04580	Biological Testing Equipment	54,820	54,820	5	Entire System	3.35%	\$1,835
2004	w04581	Time & Attendance Workforce System (ADP)	385,553	385,553	6	Undetermined/Unqualified	0.00%	\$0
2004	51004582	Vehicles 2004	2,326,947	2,326,947	6	Undetermined/Unqualified	0.00%	\$0
2004	51004585	Lawn Mowers & Trailers	36,475	36,475	6	Undetermined/Unqualified	0.00%	\$0

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2004	51004586	Building & Furniture - Parma Control	0	0	8	2nd High, PV, and Pearl	0.00%	\$0
2004	w04587	Chemical Feeder Process Improvements	139,537	139,537	6	Undetermined/Unqualified	0.00%	\$0
2005	51005435	Crown Water Works Plant	133,964	133,964	2	Western Suburbs	8.40%	\$11,253
2005	51005436	Culvert under Courtland Blvd.	64,543	64,543	1	Cleveland Only	0.00%	\$0
2005	51005440	Morgan Filter Rehab Construction	26,225,323	26,225,323	10	Western City and Suburbs	5.23%	\$1,371,145
2005	w05441	Tower City Center Water Infrastructure	1,398,306	1,304,137	1	Cleveland Only	0.00%	\$0
2005	w05442	Cleaning & Cement Mortar Lining - 2006	4,828,442	4,828,442	1	Cleveland Only	0.00%	\$0
2005	51005443	Morgan Pump Station Demolition	1,727,411	1,727,411	10	Western City and Suburbs	5.23%	\$90,315
2005	51005444	West 44th Street Bridge	66,694	66,694	1	Cleveland Only	0.00%	\$0
2005	w05445	Microwave 800 MHz	0	0	6	Undetermined/Unqualified	0.00%	\$0
2005	w05446	Nottingham Pump Control	2,715,816	2,715,816	3	Eastern Suburbs	0.00%	\$0
2005	w05450	Meter Automation AMR -- Old - Large Meter Right Sizing	94,014,547	46,614,132	5	Entire System	3.35%	\$1,560,594
2005	51005590	Vehicles 2005	1,796,922	1,796,922	6	Undetermined/Unqualified	0.00%	\$0
2005	51005591	Computer Hardware & Software	0	0	6	Undetermined/Unqualified	0.00%	\$0
2006	w06451	Jennings Road Improvements	40,048	40,048	1	Cleveland Only	0.00%	\$0
2006	w06452	Morgan East Reservoir	39,129,223	39,129,223	10	Western City and Suburbs	5.23%	\$2,045,802
2006	w06453	Flats East Bank	0	0	1	Cleveland Only	0.00%	\$0
2006	w06455	Keller II Water Tower	4,358,000	4,276,142	4	Pearl Only	0.00%	\$0
2006	51006456	Fisher Road Restoration	57,500	57,500	1	Cleveland Only	0.00%	\$0
2006	51006457	Kirtland Crib - Steel Protection	84,080	84,080	11	Eastern City and Suburbs	0.00%	\$0
2006	w06458	Water Main Rehab 2007	5,781,833	5,781,833	1	Cleveland Only	0.00%	\$0
2006	w06459	Renovations 1201 Lakeside	2,050,000	1,503,054	5	Entire System	3.35%	\$50,321
2006	w06460	Warehouse Improvements Ph I & II	10,775,663	10,563,011	5	Entire System	3.35%	\$353,639
2006	w06461	General Engineering Services	2,888,735	2,888,735	6	Undetermined/Unqualified	0.00%	\$0
2006	w06592	Oracle Licenses	968,640	968,640	6	Undetermined/Unqualified	0.00%	\$0
2006	w06593	Distribution & Maintenance Equipment	329,860	329,860	6	Undetermined/Unqualified	0.00%	\$0
2006	w06594	Vehicles 2006	1,836,323	1,836,323	6	Undetermined/Unqualified	0.00%	\$0
2006	51006595	Office Furniture	0	0	6	Undetermined/Unqualified	0.00%	\$0
2006	w06596	Computer Hardware & Software	805,619	804,299	6	Undetermined/Unqualified	0.00%	\$0
2006	51006597	Plasma Mass Spectrometer	201,168	201,168	6	Undetermined/Unqualified	0.00%	\$0
2007	w07465	Raw Water Monitoring System	178,237	178,237	6	Undetermined/Unqualified	0.00%	\$0
2007	w07466	Crown Water Plant	24,573,400	13,128,815	10	Western City and Suburbs	5.23%	\$686,417
2007	w07467	Quincy Ave. Rehab	726,810	726,810	1	Cleveland Only	0.00%	\$0
2007	w07468	Kammis Corner Underground Duct	172,426	84,743	1	Cleveland Only	0.00%	\$0
2007	w07469	Kammis Corner Streetscape	26,110	26,110	1	Cleveland Only	0.00%	\$0
2007	w07470	West 150th St. Reconstruction	197,209	197,209	1	Cleveland Only	0.00%	\$0
2007	w07471	Cornell Road Bridge	197,065	197,065	1	Cleveland Only	0.00%	\$0
2007	w07472	Woodland Ave. & Kinsman Road	339,336	339,336	1	Cleveland Only	0.00%	\$0
2007	w07473	Kirtland Pump Station Rehab	17,327,102	17,302,602	11	Eastern City and Suburbs	0.00%	\$0
2007	w07474	Big Creek Watershed Stormwater	136,000	136,000	1	Cleveland Only	0.00%	\$0
2007	w07475	Water Main Rehab 2008	5,568,852	5,568,852	1	Cleveland Only	0.00%	\$0

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2007	w07476	Fairmount Pump Station Rehab	22,246,927	22,199,169	11	Eastern City and Suburbs	0.00%	\$0
2007	w07477	Suburban Watermain Renewal - Year 1 - Year 5	45,000,000	40,913,620	17	Suburbs - New Agreement	0.00%	\$0
2007	w07478	Morgan Pretreatment and Residuals	40,805,768	39,857,013	10	Western City and Suburbs	5.23%	\$2,083,853
2007	w07479	Aetna Road Bridge	243,241	243,241	1	Cleveland Only	0.00%	\$0
2007	w07480	Sustainability Program	0	0	6	Undetermined/Unqualified	0.00%	\$0
2007	w07481	Trunk Main Renewal Program	0	0	6	Undetermined/Unqualified	0.00%	\$0
2007	w07482	Facilities Improvements	0	0	6	Undetermined/Unqualified	0.00%	\$0
2007	w07600	Vehicles 2007	2,985,506	2,985,506	6	Undetermined/Unqualified	0.00%	\$0
2007	w07601	Computer Hardware & Software	375,232	375,232	6	Undetermined/Unqualified	0.00%	\$0
2007	51007602	Citywide Permit System Hardware	82,584	82,584	6	Undetermined/Unqualified	0.00%	\$0
2008	w08483	Replace & rehab cranes @ Water Plants & P.S.	119,715	119,715	5	Entire System	3.35%	\$4,008
2008	51008484	Bellaire Road Rehabilitation - Ph. I	116,412	116,412	1	Cleveland Only	0.00%	\$0
2008	51008485	Avenue District: E. 12th St.-Lakeside to St. Clair	26,799	26,799	1	Cleveland Only	0.00%	\$0
2008	w08486	Rehabilitation of E. 30th St.	888,140	639,807	1	Cleveland Only	0.00%	\$0
2008	w08487	Bellaire Road Rehabilitation - Ph. II	85,374	85,374	1	Cleveland Only	0.00%	\$0
2008	w08488	Rehabilitation of Broadway Ave.	565,180	221,977	1	Cleveland Only	0.00%	\$0
2008	w08489	GIS Build-Out @ 205 St. Clair	240,685	240,685	5	Entire System	3.35%	\$8,058
2008	w08490	Water Tank Rehabilitation	7,226,554	6,967,774	5	Entire System	3.35%	\$233,274
2008	51008491	Roof Rehabilitation and Replacement at Non-Plant Facility	1,017,545	1,017,545	5	Entire System	3.35%	\$34,066
2008	51008492	Fencing at Green Rd. Pump Station	71,596	71,596	11	Eastern City and Suburbs	0.00%	\$0
2008	w08493	Aurora Rd. Pump Station & Water Mains	7,103,474	7,103,474	11	Eastern City and Suburbs	0.00%	\$0
2008	w08494	Cook Rd. Tower & Water Mains	0	0	6	Undetermined/Unqualified	0.00%	\$0
2008	w08495	The Avenues Phase 3	45,450	45,450	1	Cleveland Only	0.00%	\$0
2008	w08496	Water Main Rehab 2009	4,420,286	4,420,286	1	Cleveland Only	0.00%	\$0
2008	w08497	General Engineering Services - Phase V	3,452,545	3,442,890	6	Undetermined/Unqualified	0.00%	\$0
2008	w08498	Baldwin Residuals & Reservoir	17,207,616	16,511,532	11	Eastern City and Suburbs	0.00%	\$0
2008	w08499	Brecksville Distribution Water Quality Improvements	228,679	215,680	12	2nd High - West	0.00%	\$0
2008	51008603	Replacement of Turbidimeters	30,240	30,240	5	Entire System	3.35%	\$1,012
2008	w08604	Vehicles 2008	755,941	755,941	6	Undetermined/Unqualified	0.00%	\$0
2008	w08605	Payment Remittance Processing	450,000	414,034	5	Entire System	3.35%	\$13,861
2008	51008606	Gas Chromatograph & Appertenances	62,011	62,011	5	Entire System	3.35%	\$2,076
2008	51008607	Replacement of Large Submersible Pumps at Various	40,000	40,000	6	Undetermined/Unqualified	0.00%	\$0
2008	w08608	Replacement of Large Valve Actuators for Independent	53,000	47,625	5	Entire System	3.35%	\$1,594
2008	w08609	2008 Computer Hardware and Software	1,243,684	1,243,223	6	Undetermined/Unqualified	0.00%	\$0
2009	w09100	West 77th Street Bridge	108,310	108,310	1	Cleveland Only	0.00%	\$0
2009	w09101	Detroit Ave. Streetscape	91,642	91,642	6	Undetermined/Unqualified	0.00%	\$0
2009	w09102	Property Acquisition @ 4204 Harvard Ave.	68,000	68,000	5	Entire System	3.35%	\$2,277
2009	w09103	Rehabilitation of Superior Ave.	965,131	690,006	1	Cleveland Only	0.00%	\$0
2009	w09104	Rehabilitation of Central Ave.	227,000	205,910	1	Cleveland Only	0.00%	\$0
2009	w09105	South Woodland Express Main	873,329	873,329	11	Eastern City and Suburbs	0.00%	\$0
2009	w09106	Morgan Chemical Facility	17,521,405	17,078,064	10	Western City and Suburbs	5.23%	\$892,896

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2009	w09107	Energy Management	2,000,000	0	6	Undetermined/Unqualified	0.00%	\$0
2009	w09108	Cedar Road Reconstruction	1,232,000	999,625	11	Eastern City and Suburbs	0.00%	\$0
2009	w09109	Watermain Rehabilitation 2010	6,557,248	5,445,013	1	Cleveland Only	0.00%	\$0
2009	w09110	Harvard Yards Facility Modifications	867,315	663,096	5	Entire System	3.35%	\$22,200
2009	w09111	Aurora Rd. Pump Station Engineering Services	0	0	11	Eastern City and Suburbs	0.00%	\$0
2009	w09112	Old River Channel Bulkheads	0	0	1	Cleveland Only	0.00%	\$0
2009	w09610	Automated Vehicle Location System	540,585	378,335	6	Undetermined/Unqualified	0.00%	\$0
2009	w09611	Vehicles 2009	2,498,471	1,552,489	6	Undetermined/Unqualified	0.00%	\$0
2010	w10113	Transmission Main Renewal Program	8,000,000	1,951,964	5	Entire System	3.35%	\$65,350
2010	w10114	Municipal Solid Waste Energy Project	0	0	6	Undetermined/Unqualified	0.00%	\$0
2010	w10115	Lorain Avenue Resurfacing	29,525	0	1	Cleveland Only	0.00%	\$0
2010	w10116	General Engineering Services Ph. VI	3,296,166	2,746,868	6	Undetermined/Unqualified	0.00%	\$0
2010	w10117	Martin Luther King Blvd.	402,000	135,619	1	Cleveland Only	0.00%	\$0
2010	w10118	E. 88th/Crane/E.91st Reconstruction	408,000	212,525	1	Cleveland Only	0.00%	\$0
2010	w10119	Security Upgrades & Improvements	284,995	278,190	5	Entire System	3.35%	\$9,314
2010	w10120	Lakefront West Pedestrian Tunnels	14,290	14,290	1	Cleveland Only	0.00%	\$0
2010	w10122	E. 93rd St. Bridge Rehab	16,147	0	1	Cleveland Only	0.00%	\$0
2010	w10123	Water Main Rehabilitation 2011	3,000,000	1,715,540	1	Cleveland Only	0.00%	\$0
2010	w10124	Bessemer Avenue Phase 2A	293,241	293,241	1	Cleveland Only	0.00%	\$0
2010	w10612	Computer Hardware & Software 2010	338,000	337,563	6	Undetermined/Unqualified	0.00%	\$0
2010	w10613	Security/CNL Project	40,000	40,000	5	Entire System	3.35%	\$1,339
2010	w10614	Major Repair & Upgrade of Nottingham Basin Chain S	120,000	119,505	11	Eastern City and Suburbs	0.00%	\$0
2010	w10615	TASC Cubicles	15,000	13,964	6	Undetermined/Unqualified	0.00%	\$0
2010	w10616	GIS SAN	165,719	165,719	5	Entire System	3.35%	\$5,548
2011	w11125	Morgan Raw Water Pump Station Improvements	5,733,200	5,406,803	10	Western City and Suburbs	5.23%	\$282,685
2011	w11126	E. 76th St. Relocation	16,000	0	1	Cleveland Only	0.00%	\$0
2011	w11127	Water Main Rehabilitation 2012	3,105,000	1,905,138	1	Cleveland Only	0.00%	\$0
2011	w11128	Morgana Run-Phase 1: E. 71st Street	290,377	290,377	1	Cleveland Only	0.00%	\$0
2011	c11210	Madison Ave. Rehabilitation	0	0	1	Cleveland Only	0.00%	\$0
2011	c11203	Cedar Ave. (E. 89th St. to MLK Blvd.)	0	0	1	Cleveland Only	0.00%	\$0
2011	c11216	SR 87 (Woodland Ave.) Rehabilitation (E. 55th St. to B	0	0	1	Cleveland Only	0.00%	\$0
2011	w11132	1825 Lakeside Avenue Improvements	210,000	134,202	5	Entire System	3.35%	\$4,493
2011	w11133	Detroit Avenue Streetscape (West 73rd to West 58th)	8,400	0	1	Cleveland Only	0.00%	\$0
2011	w11134	Ackley/Union/Broadway	13,092	0	1	Cleveland Only	0.00%	\$0
2011	w11135	Fulton Road from Denison to Clark	237,150	220,929	1	Cleveland Only	0.00%	\$0
2011	w11617	Computer Hardware	152,486	152,262	6	Undetermined/Unqualified	0.00%	\$0
2011	w11618	Street Restoration - 2011	50,000	0	1	Cleveland Only	0.00%	\$0
2011	w11619	Purchase of Laboratory Equipment	100,000	0	6	Undetermined/Unqualified	0.00%	\$0
2012	w12136	Lakeshore Blvd. Resurfacing	16,450	0	1	Cleveland Only	0.00%	\$0
2012	w12137	Cedar Avenue (E. 55th to E. 89th)	476,471	2,864	1	Cleveland Only	0.00%	\$0
2012	w12138	Waterloo Road Reconstruction	354,375	0	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Inch-Mile

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2012	w12139	General Engineering Services VII	3,510,560	16,884	6	Undetermined/Unqualified	0.00%	\$0
2012	w12140	Fleet Avenue	418,638	0	1	Cleveland Only	0.00%	\$0
2012	w12141	Control Systems Rehab	240,000	125,187	5	Entire System	3.35%	\$4,191
2012	w12142	Triskett Avenue Rehab	257,875	0	1	Cleveland Only	0.00%	\$0
2012	w12143	Larchmere Blvd. Rehab	125,625	0	1	Cleveland Only	0.00%	\$0
2012	w12144	Madison/W. 61 St. Bridge	57,520	57,520	1	Cleveland Only	0.00%	\$0
2012	w12145	West 74th St. Bridge	32,730	32,730	1	Cleveland Only	0.00%	\$0
2012	w12146	800 MHz Radio	2,819,933	2,819,933	5	Entire System	3.35%	\$94,409
2012	w12147	800 MHz Radio "A"	3,460,622	3,257,991	5	Entire System	3.35%	\$109,074
2012	w12148	Brainard Road Express Main	3,500,000	0	15	Cedar	0.00%	\$0
2012	w12149	Watermain Renewal 2013	7,700,866	0	1	Cleveland Only	0.00%	\$0
2012	w12150	Suburban Water Main Renewal Program Year 6 - Year 10	12,000,000	0	17	Suburbs - New Agreement	0.00%	\$0
2012	w12151	Quigley Avenue Water Main	90,000	89,934	1	Cleveland Only	0.00%	\$0
2012	w12620	Distribution and Maintenance Equipment	207,342	22,875	5	Entire System	3.35%	\$766
2012	w12621	Computer Hardware 2012	462,100	453,998	5	Entire System	3.35%	\$15,199
2012	w12622	Vehicles 2012	2,462,500	1,149,995	6	Undetermined/Unqualified	0.00%	\$0
2012	w12624	Utility Vehicles (Gators)	77,200	76,604	6	Undetermined/Unqualified	0.00%	\$0
2012	w12625	1060 Lakeside Improvements	40,000	35,912	1	Cleveland Only	0.00%	\$0
2012	w12626	West 54th Street	64,103	44,050	1	Cleveland Only	0.00%	\$0
2013	w13152	Harvard Ave Bridge Rehabilitation	6,930	6,930	1	Cleveland Only	0.00%	\$0
2013	w13153	Woodland Ave. & Buckeye Rd Rehabilitation	125,200	0	1	Cleveland Only	0.00%	\$0
2013	w13155	Secondary Station Improvements Cycle F	4,433,000	0	5	Entire System	3.35%	\$148,412
2013	w13627	Portable Potable Water Dispensing Trailer	44,100	0	5	Entire System	3.35%	\$1,476
2013	w13628	Computer Hardware & Software 2013	184,139	0	5	Entire System	3.35%	\$6,165
		totals	1,939,103,586	1,818,178,154				50,131,428

Capital Projects Listing - Westlake Allocation by Consumption

Total Allocation to Westlake	\$51,397,355
Total Capital Program	\$1,939,103,586

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1981	085001	Direct Acquisition	341,863	341,863	6	Undetermined/Unqualified	0.00%	\$0
1981	085002	Consult Pulling Machine	21,598	21,598	6	Undetermined/Unqualified	0.00%	\$0
1981	085003	Meters	3,917,621	3,917,621	5	Entire System	2.76%	\$108,220
1981	085005	Drafting Equipment	480	480	6	Undetermined/Unqualified	0.00%	\$0
1981	085006	Main Broadview Spring to Broadview	541,157	541,157	1	Cleveland Only	0.00%	\$0
1981	085007	RT 290 Sec) 27 Relocation	757	757	6	Undetermined/Unqualified	0.00%	\$0
1981	085008	Broadview & N Schaff-Engineer	1,226	1,226	1	Cleveland Only	0.00%	\$0
1981	085009	Recirculation-sludge system	594	594	6	Undetermined/Unqualified	0.00%	\$0
1981	085011	Solon water tower	138	138	3	Eastern Suburbs	0.00%	\$0
1982	085012	Replace Filters Nottingham	235,493	235,493	3	Eastern Suburbs	0.00%	\$0
1982	085014	Trunk Main Ridge Rd.	753,685	753,685	2	Western Suburbs	8.65%	\$65,179
1982	085015	New 1 20 mg Reservoir Warrens	4,070,150	4,070,150	3	Eastern Suburbs	0.00%	\$0
1982	085016	Replace old 1915 elevator	46	46	6	Undetermined/Unqualified	0.00%	\$0
1982	085018	Trunk Main 24" East 71-74 HA	41,407	41,407	11	Eastern City and Suburbs	0.00%	\$0
1982	085019	Increase First High Service	173,000	173,000	5	Entire System	2.76%	\$4,779
1982	085020	Automation - Instruments Engineering	325	325	6	Undetermined/Unqualified	0.00%	\$0
1982	085021	Replace sections of roofing	80,350	80,350	6	Undetermined/Unqualified	0.00%	\$0
1982	085022	Study for discharge piping	3,258	3,258	6	Undetermined/Unqualified	0.00%	\$0
1982	085023	Engineer ETC for Expansion Engle	2,220,210	2,220,210	8	2nd High, PV, and Pearl	0.00%	\$0
1982	085024	Engineer ETC for Expansion Pearl	257,325	257,325	4	Pearl Only	0.00%	\$0
1982	085025	Replace sump pump Nottingham	96	96	3	Eastern Suburbs	0.00%	\$0
1982	085026	Expansion Pleasant Valley Reservoir	155,658	155,658	8	2nd High, PV, and Pearl	0.00%	\$0
1982	085028	Study Improvements-Baldwin	2,667,203	2,667,203	11	Eastern City and Suburbs	0.00%	\$0
1983	085029	Install alarm system	46	46	6	Undetermined/Unqualified	0.00%	\$0
1983	085031	Pearl Rd Main Boston RD Sec B	1,624,301	1,624,301	4	Pearl Only	0.00%	\$0
1983	085032	Bagley & Whitney Main	1,425,022	1,425,022	8	2nd High, PV, and Pearl	0.00%	\$0
1983	085033	Backup pump at Independence	3,985	3,985	8	2nd High, PV, and Pearl	0.00%	\$0
1983	085034	Backup pump at Cedar-Winch	8,899	8,899	3	Eastern Suburbs	0.00%	\$0
1983	085035	Backup pump at Pleasant Valley	642,403	642,403	7	2nd and PV	0.00%	\$0
1983	085036	(480 (1039) Cleveland & Brooklyn	269	269	1	Cleveland Only	0.00%	\$0
1983	085037	3000 Gallon Tower Blossom	1,956,685	1,956,685	7	2nd and PV	0.00%	\$0
1983	085038	1st High Booster pump at Can	750	750	6	Undetermined/Unqualified	0.00%	\$0
1983	085039	Restricted Main Webster Road	1,092	1,092	6	Undetermined/Unqualified	0.00%	\$0
1983	085040	Expand Crown Filter	22,736	22,736	2	Western Suburbs	8.65%	\$1,966
1983	085041	CUY CR City Lee Rd. in Shaker	2,503	2,503	3	Eastern Suburbs	0.00%	\$0
1983	085042	CUY City Warrensville Ctr. Rd.	2,227	2,227	3	Eastern Suburbs	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Consumption

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1983	085043	CUY City Pearl Rd. Strongsville	1,161	1,161	4	Pearl Only	0.00%	\$0
1983	085044	CUY City Harvard Rd. Moreland	47	47	3	Eastern Suburbs	0.00%	\$0
1983	085045	Force A/C SB 303-691 Center	20	20	6	Undetermined/Unqualified	0.00%	\$0
1983	085046	Division Filter Study - Stru	88,711	88,711	10	Western City and Suburbs	6.45%	\$5,721
1983	085047	Rehab Sub Electric Facilities	60	60	6	Undetermined/Unqualified	0.00%	\$0
1984	085048	Cleaning & Relining Program	1,798,297	1,798,297	5	Entire System	2.76%	\$49,676
1984	085049	Pitometer Survey of Distribution	491,693	491,693	5	Entire System	2.76%	\$13,582
1984	085050	Install Roms	1,473,104	1,473,104	6	Undetermined/Unqualified	0.00%	\$0
1984	085051	Strongsville Maintenance Yards Construction	186,863	186,863	8	2nd High, PV, and Pearl	0.00%	\$0
1984	085052	2 Yr Study Plan Etc Cud	100,967	100,967	6	Undetermined/Unqualified	0.00%	\$0
1984	085053	8" Main in Hudson Ave E 105	462	462	1	Cleveland Only	0.00%	\$0
1984	085054	ODOT Force Account 1480	604,640	604,640	5	Entire System	2.76%	\$16,702
1984	085055	Fencing & Landscaping Baldwin	92,955	92,955	11	Eastern City and Suburbs	0.00%	\$0
1984	085056	Shoring & Retaining Baldwin	170,892	170,892	3	Eastern Suburbs	0.00%	\$0
1984	085057	Fencing & Security Nottingham	12,093	12,093	3	Eastern Suburbs	0.00%	\$0
1984	085058	Cleaning & Relining Mains by CWD	2,210	2,210	6	Undetermined/Unqualified	0.00%	\$0
1984	085059	Electrical Appurtenances & Var	490	490	6	Undetermined/Unqualified	0.00%	\$0
1984	085060	Cleaning & Relining Mains	1,364,375	1,364,375	5	Entire System	2.76%	\$37,689
1984	085061	Main Burke Ave at E78th	100,907	100,907	1	Cleveland Only	0.00%	\$0
1984	085062	Main E78th from Burke Ave to Ma	44,677	44,677	1	Cleveland Only	0.00%	\$0
1984	085063	Replace 40 Hydrant Valves WI	296,579	296,579	7	2nd and PV	0.00%	\$0
1984	085064	Preliminary Eng Division set	400	400	6	Undetermined/Unqualified	0.00%	\$0
1984	085065	Completely Remove Warrensville	211	211	3	Eastern Suburbs	0.00%	\$0
1984	085066	Telemetering Etc #2 Pump Eng	11,134	11,134	6	Undetermined/Unqualified	0.00%	\$0
1984	085067	Install valves at Cedar Winchester	683	683	3	Eastern Suburbs	0.00%	\$0
1984	085068	City via ODOT county Force	34	34	6	Undetermined/Unqualified	0.00%	\$0
1984	085069	Main-Cleveland Industrial	376	376	1	Cleveland Only	0.00%	\$0
1984	085070	Misc Maintenance Service	18	18	6	Undetermined/Unqualified	0.00%	\$0
1985	085071	Renovation of Wastewater - D	5,554	5,554	6	Undetermined/Unqualified	0.00%	\$0
1985	085072	Replace Roofing System at Facility	162,653	162,653	6	Undetermined/Unqualified	0.00%	\$0
1985	085073	Restore Backwash Water Reservoir	6,855	6,855	6	Undetermined/Unqualified	0.00%	\$0
1985	085074	Site Purchase Highland-Brecksville	55	55	7	2nd and PV	0.00%	\$0
1985	085075	Waterwork-Pearl Rd	292	292	8	2nd High, PV, and Pearl	0.00%	\$0
1985	085076	Clean & Relining Water mains	2,037,884	2,037,884	5	Entire System	2.76%	\$56,234
1985	085077	Replace Valves at Nottingham	96,781	96,781	3	Eastern Suburbs	0.00%	\$0
1985	085078	Replace Butterfly Valves at Nottingham	479	479	3	Eastern Suburbs	0.00%	\$0
1985	085079	Replace Chlorinator - Nottingham	232	232	3	Eastern Suburbs	0.00%	\$0
1985	085080	ODOT Richmond Rd RT 175	357	357	3	Eastern Suburbs	0.00%	\$0
1985	085081	Clean & Relining Water mains	36,483	36,483	5	Entire System	2.76%	\$1,008
1985	085082	Euclid Creek Flood Control	38	38	3	Eastern Suburbs	0.00%	\$0
1985	085083	Crown Intake Restoration	1,642,811	1,642,811	2	Western Suburbs	8.65%	\$142,072

Capital Projects Listing - Westlake Allocation by Consumption

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1985	085084	Clean & Relining Supply Mains	2,272,543	2,272,543	5	Entire System	2.76%	\$62,776
1985	085085	Computerized Drafting system	225,791	225,791	6	Undetermined/Unqualified	0.00%	\$0
1985	085086	Computer Record System	90,100	90,100	6	Undetermined/Unqualified	0.00%	\$0
1985	085087	Install Telemetering -Seven Hills	46	46	6	Undetermined/Unqualified	0.00%	\$0
1985	085088	Rehab Driveway at DPU Building	152,136	152,136	1	Cleveland Only	0.00%	\$0
1985	085089	Maintenance work at Baldwin	83,490	83,490	11	Eastern City and Suburbs	0.00%	\$0
1985	085090	Replace Roof-Radio Repair	39,990	39,990	5	Entire System	2.76%	\$1,105
1985	085091	Clean & reline 85K Ft Mains	3,115,850	3,115,850	5	Entire System	2.76%	\$86,072
1985	085093	Electrification at Division	67	67	6	Undetermined/Unqualified	0.00%	\$0
1985	085094	Electrification at Division	27,654	27,654	10	Western City and Suburbs	6.45%	\$1,784
1985	085096	New Filtration Facilities	25,999	25,999	6	Undetermined/Unqualified	0.00%	\$0
1985	085097	Miscellaneous	510,266	510,266	6	Undetermined/Unqualified	0.00%	\$0
1985	085098	Consulting	122,953	122,953	6	Undetermined/Unqualified	0.00%	\$0
1985	085099	Water Main E9th	465,983	465,983	1	Cleveland Only	0.00%	\$0
1985	085100	Crown Intake Diving	157,970	157,970	2	Western Suburbs	8.65%	\$13,661
1985	085101	Clean & Line Mains 1985	2,376,236	2,376,236	5	Entire System	2.76%	\$65,641
1986	086001	Baldwin Sludge Rehabilitation	12,819,417	12,819,417	3	Eastern Suburbs	0.00%	\$0
1986	086010	Division Rehabilitation	104,180,086	104,180,086	10	Western City and Suburbs	6.45%	\$6,718,949
1986	086011	Division Rehabilitation/Professional services	10,809,067	10,809,067	10	Western City and Suburbs	6.45%	\$697,116
1986	086030	Nottingham 2nd high rehab	2,804	2,804	3	Eastern Suburbs	0.00%	\$0
1986	086035	Water Main, State-Brecksville	3,323,986	3,323,986	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086040	Water Mains, various	121,425	121,425	1	Cleveland Only	0.00%	\$0
1986	086045	Crown sludge Rehab	7,682,507	7,682,507	2	Western Suburbs	8.65%	\$664,391
1986	086050	Nottingham sludge rehab	7,143,472	7,143,472	3	Eastern Suburbs	0.00%	\$0
1986	086055	Independence Addition	253,433	253,433	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086060	Cedar-Winchester Rehab	258,481	258,481	3	Eastern Suburbs	0.00%	\$0
1986	086070	Water main, W65th-Detroit Ave	5,339	5,339	1	Cleveland Only	0.00%	\$0
1986	086075	Crown Masonry Rehab	248,558	248,558	2	Western Suburbs	8.65%	\$21,496
1986	086080	Nottingham Land Improvements	4,938	4,938	3	Eastern Suburbs	0.00%	\$0
1986	086085	Shepard Station Improvements	303,588	303,588	3	Eastern Suburbs	0.00%	\$0
1986	086095	Pitometer services	288,171	288,171	5	Entire System	2.76%	\$7,960
1986	086100	Kirtland Parking Garage	86,553	86,553	6	Undetermined/Unqualified	0.00%	\$0
1986	086105	Water Main, Highland-Richmond	360,396	360,396	3	Eastern Suburbs	0.00%	\$0
1986	086110	Parma Control SCADA System	1,340,333	1,340,333	5	Entire System	2.76%	\$37,025
1986	086120	Water Main, Brecksville Rd	534	534	7	2nd and PV	0.00%	\$0
1986	086125	Clean & Relining Mains 1985	3,712	3,712	6	Undetermined/Unqualified	0.00%	\$0
1986	086130	Water Main, W6th-Lakeside Ave	295,655	295,655	1	Cleveland Only	0.00%	\$0
1986	086135	Water Main, W10th-St.Clair Ave	24,261	24,261	1	Cleveland Only	0.00%	\$0
1986	086349	Nottingham, Filter Rehab	1,752	1,752	3	Eastern Suburbs	0.00%	\$0
1986	086382	Warrensville Reservoir	18	18	3	Eastern Suburbs	0.00%	\$0
1986	086398	Broadway Booster Station	2,796,417	2,796,417	3	Eastern Suburbs	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Consumption

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1986	086454	Engle Rd Expansion	1,392	1,392	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086465	Nottingham Capacity Expansion	1,119,227	1,119,227	3	Eastern Suburbs	0.00%	\$0
1986	086474	Division Phase 1 w/Bohen Assoc	0	0	6	Undetermined/Unqualified	0.00%	\$0
1986	086486	Water Main, Bagley Whitney	13,557	13,557	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086492	Water Main, Fulton- Denison	51,202	51,202	2	Western Suburbs	8.65%	\$4,428
1986	086493	Water Main, Fulton-Brecksville	48,150	48,150	2	Western Suburbs	8.65%	\$4,164
1986	086538	Baldwin Scrubber System	655,593	655,593	11	Eastern City and Suburbs	0.00%	\$0
1986	086545	Shepard Road Reservoir Main	18,514	18,514	3	Eastern Suburbs	0.00%	\$0
1986	086546	Private Main Insulation's	146	146	1	Cleveland Only	0.00%	\$0
1986	086547	Contractor Installing Rom's	20,120	20,120	6	Undetermined/Unqualified	0.00%	\$0
1986	086550	Shepard Road Pump/Gen Rehab	15,852	15,852	3	Eastern Suburbs	0.00%	\$0
1986	086551	Engineering Study	3,118	3,118	6	Undetermined/Unqualified	0.00%	\$0
1986	086581	Water Main Detroit-Shoreway	612	612	1	Cleveland Only	0.00%	\$0
1986	086583	Baldwin Heating System Rehab	413,259	413,259	11	Eastern City and Suburbs	0.00%	\$0
1986	086611	Independence Rehab Pum	0	0	8	2nd High, PV, and Pearl	0.00%	\$0
1986	086613	Crown Intake Restoration	22,739	22,739	2	Western Suburbs	8.65%	\$1,966
1986	086615	Nottingham Restore NW System	182,159	182,159	3	Eastern Suburbs	0.00%	\$0
1986	086616	Crown, Restore WW System	134,525	134,525	2	Western Suburbs	8.65%	\$11,634
1986	086617	Computerized Drafting System	11,495	11,495	6	Undetermined/Unqualified	0.00%	\$0
1986	086619	Convert High Pressure System	2,767	2,767	6	Undetermined/Unqualified	0.00%	\$0
1986	086620	Water Main, Woodhill Road	595,383	595,383	11	Eastern City and Suburbs	0.00%	\$0
1986	086629	DPU Building	20,235	20,235	5	Entire System	2.76%	\$559
1986	086631	Water Main , Old River	60,040	60,040	1	Cleveland Only	0.00%	\$0
1986	086638	Relocate 250 of 30 Main E 7	1,277	1,277	1	Cleveland Only	0.00%	\$0
1986	086640	Water Main, Various Culverts	98,840	98,840	6	Undetermined/Unqualified	0.00%	\$0
1986	086642	Crown-Sprague Main Part 2	3,653,992	3,653,992	2	Western Suburbs	8.65%	\$316,001
1986	086645	Water Main, E 88	44,953	44,953	1	Cleveland Only	0.00%	\$0
1986	086646	Replace Tap Sleeve & DIV	4,353	4,353	6	Undetermined/Unqualified	0.00%	\$0
1986	086647	Water Main, Solon- Chagrin	1,273,786	1,273,786	3	Eastern Suburbs	0.00%	\$0
1986	086648	Water Mains, Var 8" & 12"	1,095,015	1,095,015	1	Cleveland Only	0.00%	\$0
1986	086651	Crown - Sprague Main Part 1	1,705,125	1,705,125	2	Western Suburbs	8.65%	\$147,461
1986	086652	Water Main, Bethel Court	43,646	43,646	1	Cleveland Only	0.00%	\$0
1986	086655	Rehab Bald/Fair Meter System	75,952	75,952	11	Eastern City and Suburbs	0.00%	\$0
1986	086657	DPU Building, Replace Roof	123,664	123,664	5	Entire System	2.76%	\$3,416
1986	086658	Nottingham Interconnect	140,121	140,121	3	Eastern Suburbs	0.00%	\$0
1986	086659	Cleaning & Lining Supply Main	5,894,714	5,894,714	5	Entire System	2.76%	\$162,835
1986	086660	Repair Lorain RD Water Main	145,000	145,000	1	Cleveland Only	0.00%	\$0
1986	086661	Restore Reservoir Tank-Engle	232,250	232,250	2	Western Suburbs	8.65%	\$20,085
1986	086662	Painting Reservoir Tank-Engle	69,680	69,680	2	Western Suburbs	8.65%	\$6,026
1986	086664	Extend & Enclose Door at Pub	11,250	11,250	6	Undetermined/Unqualified	0.00%	\$0
1986	086667	Harborview Drive Water Main	42,574	42,574	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Consumption

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1986	086668	Loading Dock, Fairmount Pump	61,910	61,910	11	Eastern City and Suburbs	0.00%	\$0
1986	086669	Replace Tap Sleeves-Division	277,015	277,015	10	Western City and Suburbs	6.45%	\$17,866
1986	086670	Water Main, Old River Road	275,458	275,458	1	Cleveland Only	0.00%	\$0
1986	086671	Harvard Yard Property Expansion	338,500	338,500	5	Entire System	2.76%	\$9,351
1986	086672	Rehab 60" Raw Water Main	2,593,854	2,593,854	11	Eastern City and Suburbs	0.00%	\$0
1987	087673	Aerial Photo and Surveys	30,086	30,086	5	Entire System	2.76%	\$831
1987	087674	Cleaning and Linig Main	4,258,610	4,258,610	1	Cleveland Only	0.00%	\$0
1987	086675	Replace Crown Flocculators	452,688	452,688	2	Western Suburbs	8.65%	\$39,149
1987	086676	East 80 Main replacement	55,457	55,457	1	Cleveland Only	0.00%	\$0
1987	086677	Richmond Ave Main replacement	96,708	96,708	3	Eastern Suburbs	0.00%	\$0
1987	086678	Parma Pump 4e Rehabilitation	105,785	105,785	8	2nd High, PV, and Pearl	0.00%	\$0
1987	086679	Crown-Sprague Main Part 3	1,842,489	1,842,489	2	Western Suburbs	8.65%	\$159,340
1987	086680	E 71 St Main Replacement	142,875	142,875	1	Cleveland Only	0.00%	\$0
1987	086681	Replace Crown Boilers	298,178	298,178	2	Western Suburbs	8.65%	\$25,787
1987	086682	Crown-Sprague Main Sec 1 4A	1,716,853	1,716,853	2	Western Suburbs	8.65%	\$148,475
1987	086683	Crown-Sprague Main Sec 1 4B	2,264,082	2,264,082	2	Western Suburbs	8.65%	\$195,800
1987	086685	West 130 St Main Replacement	145,247	145,247	1	Cleveland Only	0.00%	\$0
1987	086686	Fulton -Brecksville Supply main Sec1	3,007,297	3,007,297	2	Western Suburbs	8.65%	\$260,074
1987	086687	Fulton -Brecksville Supply main Sec1	2,994,824	2,994,824	2	Western Suburbs	8.65%	\$258,995
1987	086688	Brecksville Water supply Main	1,002,587	1,002,587	7	2nd and PV	0.00%	\$0
1987	086689	Oaks/Bdview/Akins Main Sec 1	1,176,383	1,176,383	7	2nd and PV	0.00%	\$0
1987	086690	Oaks/Bdview/Akins Main Sec 2	1,279,007	1,279,007	7	2nd and PV	0.00%	\$0
1987	086691	Broopark-Dearing Supply Main	5,381,391	5,381,391	2	Western Suburbs	8.65%	\$465,388
1987	086692	Crown Low Service Supply Main	346,964	346,964	2	Western Suburbs	8.65%	\$30,006
1987	086693	Fulton-Denison-Bkpark Supply Main	4,818,473	4,818,473	2	Western Suburbs	8.65%	\$416,706
1987	086694	1989 Cleaning & Lining	5,432,430	5,432,430	5	Entire System	2.76%	\$150,065
1987	086695	Distribution Main Replacement Program	2,480,613	2,480,613	1	Cleveland Only	0.00%	\$0
1987	086696	Division-Fairmount Boiler Replacement	764,904	764,904	5	Entire System	2.76%	\$21,130
1987	086697	Aerial Photo Mapping Survey	323,474	323,474	5	Entire System	2.76%	\$8,936
1988	088800	New Warrensville Pump Station	1,959,145	1,959,145	3	Eastern Suburbs	0.00%	\$0
1988	088801	East 91 st 12" Main Replacement	26,752	26,752	1	Cleveland Only	0.00%	\$0
1988	088802	Crown Plant Neutralization System	102,073	102,073	2	Western Suburbs	8.65%	\$8,827
1988	088803	Division Dam Board Installation	108,112	108,112	10	Western City and Suburbs	6.45%	\$6,973
1988	088805	Rehabilitation Kirtland Raw Mains II	4,919,327	4,919,327	11	Eastern City and Suburbs	0.00%	\$0
1988	51088806	Harvard Yards - Professional Services	1,928,444	1,928,444	5	Entire System	2.76%	\$53,271
1988	088807	Pump Station Battery Installations	43,022	43,022	6	Undetermined/Unqualified	0.00%	\$0
1988	088808	Cook Rd Water Main	311,402	311,402	7	2nd and PV	0.00%	\$0
1988	088809	S. Marginal Road 12" Main	350,559	350,559	1	Cleveland Only	0.00%	\$0
1988	088810	Nottingham St. 2nd HS Improve	5,816,915	5,816,915	3	Eastern Suburbs	0.00%	\$0
1988	088811	Paving Plant Service Roads	1,993,148	1,993,148	1	Cleveland Only	0.00%	\$0
1988	088812	Meter Bldg at Crown Plant	31,393	31,393	2	Western Suburbs	8.65%	\$2,715

Capital Projects Listing - Westlake Allocation by Consumption

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1988	088813	1989 Cleaning & Relining Program	9,697,620	9,697,620	5	Entire System	2.76%	\$267,886
1988	088815	Install Cathod Protect Sys	245,110	245,110	5	Entire System	2.76%	\$6,771
1988	088816	Replace Valves - Kinsman Tank	366,531	366,531	3	Eastern Suburbs	0.00%	\$0
1988	088817	Interconnect Line - Fairmount	141,943	141,943	3	Eastern Suburbs	0.00%	\$0
1988	088818	Highland / Richmond Sec 2 &	993,970	993,970	3	Eastern Suburbs	0.00%	\$0
1988	088819	Rehab Plans for Filters	6,875,671	6,875,671	3	Eastern Suburbs	0.00%	\$0
1988	088820	Rehab Kirtland Intake Crib	2,314,233	2,314,233	11	Eastern City and Suburbs	0.00%	\$0
1988	51088821	Baldwin Filter Control Valves	936,203	936,203	11	Eastern City and Suburbs	0.00%	\$0
1988	088822	Dist Main Replacement Program II	150,363	150,363	1	Cleveland Only	0.00%	\$0
1989	51089900	Reline Liquid Alum Tanks	198,990	198,990	6	Undetermined/Unqualified	0.00%	\$0
1989	51089901	E. Aurora Rd. 16" Water Main	194,624	194,624	3	Eastern Suburbs	0.00%	\$0
1989	51089902	Remove/Replace PCB Capacitor	288,163	288,163	6	Undetermined/Unqualified	0.00%	\$0
1989	51089903	Parma Control Ctr Renovation	7,432,481	7,432,481	5	Entire System	2.76%	\$205,314
1989	51089904	Harvard Yards - Construction	31,244,542	31,244,542	5	Entire System	2.76%	\$863,095
1989	51089905	Darrow Rd Tower Replacement	2,977,132	2,977,132	3	Eastern Suburbs	0.00%	\$0
1989	51089906	Pettibone Rd 24" Supply Main	188,408	188,408	3	Eastern Suburbs	0.00%	\$0
1989	51089907	Rehab Kirtland Raw Main III	5,207,648	5,207,648	3	Eastern Suburbs	0.00%	\$0
1989	51089908	Repair Twin Conduit at Division	638,443	638,443	10	Western City and Suburbs	6.45%	\$41,175
1989	51089909	Parma Pump Station Expansion-Engineering	530,860	530,860	8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089910	Land Acquis - N Royalton	2,497	2,497	9	PV and Pearl	0.00%	\$0
1989	51089911	Parma Pump Stat Expansion	4,111,345	4,111,345	8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089912	Parma Pearl Express Main	9,628,516	9,628,516	8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	1- Pearl_York Phase I, II, & III design			8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	2- Pearl_York Phase I			8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	3- Pearl_York Phase II			8	2nd High, PV, and Pearl	0.00%	\$0
	51089912	4- Pearl_York Phase III			8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089913	Nottingham Control Valves	2,605	2,605	3	Eastern Suburbs	0.00%	\$0
1989	51089914	Engle Road Pump Station	6,910,202	6,910,202	8	2nd High, PV, and Pearl	0.00%	\$0
1989	51089915	Univ Hosp Main Improvements	674,065	674,065	1	Cleveland Only	0.00%	\$0
1990	51090920	1990 Cleaning & Relining Program	8,166,415	8,166,415	5	Entire System	2.76%	\$225,588
1990	51090921	Cochran Harper Road 2nd & 3rd	3,834,555	3,834,555	3	Eastern Suburbs	0.00%	\$0
1990	51090922	Bennett Road 3rd High Supply	4,413	4,413	4	Pearl Only	0.00%	\$0
1990	51090923	W. Shoreway 42" / 36" Relocation	1,740	1,740	1	Cleveland Only	0.00%	\$0
1990	51090924	Division - Northfield Roof Imp	38,321	38,321	6	Undetermined/Unqualified	0.00%	\$0
1990	51090925	Battery/ Charger System Update	91,632	91,632	6	Undetermined/Unqualified	0.00%	\$0
1990	51090926	Main Station Site Improvements	3,580,412	3,580,412	5	Entire System	2.76%	\$98,905
1990	51090927	Fairmount-Warrens ville Supply Main	25,189,067	25,189,067	3	Eastern Suburbs	0.00%	\$0
1990	51090928	Aerial Photo / Mapping Project	20,685	20,685	5	Entire System	2.76%	\$571
1990	51090930	Clean & Reline Trunk Mains 9	5,675,529	5,675,529	5	Entire System	2.76%	\$156,780
1990	51090931	Division Surge Tank Insulation	83,930	83,930	10	Western City and Suburbs	6.45%	\$5,413
1990	51090932	Chlorine Detection Systems	70,371	70,371	5	Entire System	2.76%	\$1,944

Capital Projects Listing - Westlake Allocation by Consumption

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1990	51090933	South Twinsburg Tower & Supply Mains	8,735,808	8,735,808	3	Eastern Suburbs	0.00%	\$0
1990	51090934	Baldwin Chlorine Feed System	105,986	105,986	11	Eastern City and Suburbs	0.00%	\$0
1990	51090935	Broadway System Expansion	558,576	558,576	3	Eastern Suburbs	0.00%	\$0
1990	51090936	Baldwin Voltage Cabling System	134,926	134,926	11	Eastern City and Suburbs	0.00%	\$0
1990	51090937	Paint Dover & Brecksville Towers	621,700	621,700	2	Western Suburbs	8.65%	\$53,765
1990	51090938	1991 Cleaning & Relining Main Program	5,196,976	5,196,976	1	Cleveland Only	0.00%	\$0
1991	51091939	Aurora / Bainbridge 36" Main	311,682	311,682	3	Eastern Suburbs	0.00%	\$0
1991	51091940	Liberty-Darrow Water Supply	4,942,739	4,942,739	3	Eastern Suburbs	0.00%	\$0
1991	51091941	PCB Removal at Nottingham	493,576	493,576	3	Eastern Suburbs	0.00%	\$0
1991	51091942	Relining Trunk Mains 91/92	2,329,700	2,329,700	5	Entire System	2.76%	\$64,355
1991	51091943	Repair Nott: Backwash Piping	1,078,095	1,078,095	3	Eastern Suburbs	0.00%	\$0
1991	51091944	Broadway Pump Station Expans	112,527	112,527	3	Eastern Suburbs	0.00%	\$0
1991	51091945	Replace Various Water Mains	2,864,343	2,864,343	6	Undetermined/Unqualified	0.00%	\$0
1991	51091946	Crown Plant Roof Replacement	197,540	197,540	2	Western Suburbs	8.65%	\$17,083
1991	51091947	Baldwin Switchgear Replacement	10,692	10,692	11	Eastern City and Suburbs	0.00%	\$0
1991	51091948	Nottingham Flocculator Replacement	1,045,872	1,045,872	3	Eastern Suburbs	0.00%	\$0
1991	51091949	Baldwin Electrical Renovation	6,595	6,595	11	Eastern City and Suburbs	0.00%	\$0
1991	51091950	Telecommunications Systems	738,144	738,144	5	Entire System	2.76%	\$20,390
1991	51091951	1992 Cleaning & Lining Program	5,160,808	5,160,808	1	Cleveland Only	0.00%	\$0
1991	51091952	Crown Plant Drainage & Rehab	586,172	586,172	2	Western Suburbs	8.65%	\$50,693
1991	51091953	Rehab Trav Water Screens 4	2,297,279	2,297,279	6	Undetermined/Unqualified	0.00%	\$0
1991	51091954	Hadden Pump Station Property Acquisition	50,992	50,992	3	Eastern Suburbs	0.00%	\$0
1991	51091955	Crown Plant Expansion Prof Svs	18,687,244	18,687,244	2	Western Suburbs	8.65%	\$1,616,092
1992	51092960	800 MHz Radio System-Professional Services	2,515,505	2,515,505	6	Undetermined/Unqualified	0.00%	\$0
1992	51092961	Catholic Protection - Kirtland	1,112,107	1,112,107	11	Eastern City and Suburbs	0.00%	\$0
1992	51092962	Clean & Line Highland Road	684,812	684,812	3	Eastern Suburbs	0.00%	\$0
1992	51092963	Computer Network System	144,227	144,227	6	Undetermined/Unqualified	0.00%	\$0
1992	51092964	Fairmount Asbestos	320,263	320,263	11	Eastern City and Suburbs	0.00%	\$0
1992	51092965	Morgan Pump Bldg. Renovation	1,987,804	1,987,804	10	Western City and Suburbs	6.45%	\$128,201
1992	51092966	Clean & Line Trunk Mains 92	2,144,542	2,144,542	5	Entire System	2.76%	\$59,241
1992	51092967	Circulation Main - W. 117 St./Long	58,775	58,775	1	Cleveland Only	0.00%	\$0
1992	51092968	800 MHz Radio System-Construction	21,606,944	21,606,944	6	Undetermined/Unqualified	0.00%	\$0
1992	51092969	Warrensville - Broadway Supply Main	12,046,541	12,046,541	3	Eastern Suburbs	0.00%	\$0
1992	51092970	Bedford Rd Water Supply Main	2,208,574	2,208,574	3	Eastern Suburbs	0.00%	\$0
1992	51092971	Aurora-Solon Supply Main	2,427,047	2,427,047	3	Eastern Suburbs	0.00%	\$0
1992	51092972	Aurora Rd. Supply Main	7,759,618	7,759,618	3	Eastern Suburbs	0.00%	\$0
1992	51092973	Renovate 1201 & 1825 Lakeside Ave	19,495,217	19,495,217	5	Entire System	2.76%	\$538,533
1992	51092974	North Royalton Pump Station & Tank	21,234,486	21,234,486	9	PV and Pearl	0.00%	\$0
1992	51092975	G. Morgan Surge Tank - Painting	149,100	149,100	10	Western City and Suburbs	6.45%	\$9,616
1992	51092976	Fairmount/Baldwin Structural Rehab	123,636	123,636	11	Eastern City and Suburbs	0.00%	\$0
1992	51092977	Nottingham Low/1st High Pump Rehab	4,689,316	4,689,316	3	Eastern Suburbs	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Consumption

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1992	51092978	Clean & Line Trunk Mains 199	5,077,214	5,077,214	5	Entire System	2.76%	\$140,252
1992	51092979	Nottingham Roof Rehab	574,811	574,811	3	Eastern Suburbs	0.00%	\$0
1992	51092980	Site Improvements Secondary Stations	646,235	646,235	5	Entire System	2.76%	\$17,851
1993	51093200	GIS - Professional Services	773,576	773,576	5	Entire System	2.76%	\$21,369
1993	51093201	Computer System Integrator Sys	3,069,663	3,069,663	5	Entire System	2.76%	\$84,796
1993	51093202	Citywide Fire Hydrant Replacement	0	0	1	Cleveland Only	0.00%	\$0
1993	51093203	Cleaning & Lining 1994	4,604,579	4,604,579	1	Cleveland Only	0.00%	\$0
1993	51093204	Church Square Water Improvement	236,613	236,613	1	Cleveland Only	0.00%	\$0
1993	51093205	Baldwin Waterworks Rehab	4,594,619	4,594,619	11	Eastern City and Suburbs	0.00%	\$0
1993	51093981	Euclid Creek Erosion Control	259,156	259,156	3	Eastern Suburbs	0.00%	\$0
1993	51093982	Clean & Line Trunk Mains 93/	3,841,421	3,841,421	5	Entire System	2.76%	\$106,115
1993	51093983	Electronic Alarms for Stations	383,468	383,468	5	Entire System	2.76%	\$10,593
1993	51093984	Baldwin Reservoir Rehabilitation	4,498,999	4,498,999	11	Eastern City and Suburbs	0.00%	\$0
1993	51093985	Crown Expansion - Construction	112,004,390	112,004,390	2	Western Suburbs	8.65%	\$9,686,252
1993	51093986	Warrens Reservoir Painting	1,401,528	1,401,528	3	Eastern Suburbs	0.00%	\$0
1993	51093987	New Hadden Pump Station	4,087,253	4,087,253	3	Eastern Suburbs	0.00%	\$0
1993	51093988	Chemical Feed Systems-All Plants	374,219	374,219	5	Entire System	2.76%	\$10,337
1993	51093989	Catholic Protection Program	2,187,736	2,187,736	5	Entire System	2.76%	\$60,434
1993	51093990	Southwest Quadrant Trunk Mains	16,765,040		2	Western Suburbs	8.65%	\$0
	51093990	1- Bennett West 130 Main (Design & Construction, ODOT)		634,200	4	Pearl Only	0.00%	\$0
	51093990	2- Pearl York Phase IV design		378,003	8	2nd High, PV, and Pearl	0.00%	\$0
	51093990	3- Pearl York Phase IV Construction		2,889,344	8	2nd High, PV, and Pearl	0.00%	\$0
	51093990	4- North Royalton Discharge Main Design		696,625	9	PV and Pearl	0.00%	\$0
	51093990	5- North Royalton Akins Phase II Construction		1,333,517	7	2nd and PV	0.00%	\$0
	51093990	6.a- North Royalton Bennett Phase II (2.97 miles)		4,795,163	4	Pearl Only	0.00%	\$0
	51093990	6.b- North Royalton Broadview, Phase I (0.27 miles)		476,463	7	2nd and PV	0.00%	\$0
	51093990	7- Engle Main (City of Middleburg Heights)		3,017,090	8	2nd High, PV, and Pearl	0.00%	\$0
	51093990	8- Sheldon Main Design		387,176	2	Western Suburbs	8.65%	\$33,483
	51093990	9- Sheldon Main Construction		2,529,972	2	Western Suburbs	8.65%	\$218,795
1993	51093991	Environmental Assessment	941,792	941,792	6	Undetermined/Unqualified	0.00%	\$0
1993	51093992	SCADA System Enhancements	1,342,071	1,342,071	5	Entire System	2.76%	\$37,073
1993	51093993	Garrett Morgan Reservoir	4,505	4,505	6	Undetermined/Unqualified	0.00%	\$0
1993	51093995	Garrett Morgan Excitor Modification	192,687	192,687	2	Western Suburbs	8.65%	\$16,664
1993	51093996	Nottingham Reservoir Basin Improvements	7,262	7,262	3	Eastern Suburbs	0.00%	\$0
1993	51093997	West 117th Street Water Main	1,788,850	1,788,850	1	Cleveland Only	0.00%	\$0
1993	51093998	EPA Plant Modification Studies	81	81	6	Undetermined/Unqualified	0.00%	\$0
1994	51094206	Garrett Morgan - Reservoir Enhancements	789,306	789,306	2	Western Suburbs	8.65%	\$68,260
1994	51094207	Curtis Wright Parkway/Bishop	134,049	134,049	3	Eastern Suburbs	0.00%	\$0
1994	51094209	Cleaning & Relining Trunk Mains	2,638,696	2,638,696	5	Entire System	2.76%	\$72,891
1994	51094210	Nottingham Stack Repair / Repl	162,343	162,343	3	Eastern Suburbs	0.00%	\$0
1994	51094211	1995 Cleaning/Lining Dist Mains	4,317,482	4,317,482	1	Cleveland Only	0.00%	\$0

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1994	51094212	1995 Catholic Protection Program	174,412	174,412	5	Entire System	2.76%	\$4,818
1994	51094213	Information Architecture	579,583	579,583	6	Undetermined/Unqualified	0.00%	\$0
1995	51095217	95/96 Trunk Main Cleaning & Lining	4,033,506	4,033,506	5	Entire System	2.76%	\$111,421
1995	51095218	Mayfield Rd. Water Main	2,026,062	2,026,062	3	Eastern Suburbs	0.00%	\$0
1995	51095219	CIP Professional Services Testing	753,400	753,400	5	Entire System	2.76%	\$20,812
1995	51095220	1996 Distribution Main Clean	5,628,553	5,628,553	1	Cleveland Only	0.00%	\$0
1995	51095221	Prospect Avenue Repairs	525,339	525,339	1	Cleveland Only	0.00%	\$0
1995	51095222	PEP - Crown	3,759,206	3,759,206	2	Western Suburbs	8.65%	\$325,100
1995	51095223	PEP - Morgan	11,595,475	11,595,475	2	Western Suburbs	8.65%	\$1,002,788
1995	51095224	PEP - Baldwin	5,904,526	5,904,526	11	Eastern City and Suburbs	0.00%	\$0
1995	51095225	PEP - Nottingham	5,157,598	5,157,598	3	Eastern Suburbs	0.00%	\$0
1995	51095226	West 9th Street/Old River Road	271,832	271,832	1	Cleveland Only	0.00%	\$0
1995	51095227	Franklin Boulevard	385,000	385,000	1	Cleveland Only	0.00%	\$0
1996	51096228	1996 Water Tower Painting Program	1,252,448	1,252,448	5	Entire System	2.76%	\$34,597
1996	51096229	Mill Creek Subdivision	356,744	356,744	1	Cleveland Only	0.00%	\$0
1996	51096230	Harvard Avenue Bridge Water Main	166,152	166,152	5	Entire System	2.76%	\$4,590
1996	51096231	West 85th Street	460,627	460,627	1	Cleveland Only	0.00%	\$0
1996	51096232	Water Tank Inspection Program	140,148	140,148	5	Entire System	2.76%	\$3,871
1996	51096233	Parna Reservoir Rehab	8,287,388	8,287,388	2	Western Suburbs	8.65%	\$716,702
1996	51096234	Kirtland Pump Station Transfer	130,154	130,154	11	Eastern City and Suburbs	0.00%	\$0
1996	51096235	Darrow Road Supply Main - Phase	13,067	13,067	3	Eastern Suburbs	0.00%	\$0
1996	51096236	1440 Lakeside Feasibility Study	63,803	63,803	1	Cleveland Only	0.00%	\$0
1996	51096237	Spring Road Water Main	189,154	189,154	1	Cleveland Only	0.00%	\$0
1996	51096238	1996/1997 Trunk Main Cleaning & Lining	2,851,756	2,851,756	5	Entire System	2.76%	\$78,777
1996	51096239	Kinsman-Green Supply Main	2,075,955	2,075,955	3	Eastern Suburbs	0.00%	\$0
1996	51096940	Broadview Road Pump Station	102	102	7	2nd and PV	0.00%	\$0
1996	51096241	Cleaning & Lining Distribution Mains	4,096,451	4,096,451	1	Cleveland Only	0.00%	\$0
1996	51096242	Demolish Various Non-Operative Stations	1,124,674	1,124,674	6	Undetermined/Unqualified	0.00%	\$0
1996	51096245	Central Commons 5 & 6	163,408	163,408	1	Cleveland Only	0.00%	\$0
1996	51096246	Kingbury at Herron Row	120,904	120,904	1	Cleveland Only	0.00%	\$0
1996	w96247	City-Wide GIS	35,509,886	35,509,886	5	Entire System	2.76%	\$980,920
1996	51096248	Fencing Site Improvements	0	0	6	Undetermined/Unqualified	0.00%	\$0
1997	51097250	East 79th Street	0	0	1	Cleveland Only	0.00%	\$0
1997	51097251	Fulton Road	33,680	33,680	1	Cleveland Only	0.00%	\$0
1997	51097252	Eddy Road	0	0	1	Cleveland Only	0.00%	\$0
1997	51097253	Hough Ave.	31,280	31,280	1	Cleveland Only	0.00%	\$0
1997	51097254	Hand Held Meter Reading System	1,862,704	1,862,704	5	Entire System	2.76%	\$51,455
1997	51097255	Distribution System Hydraulic Model	4,971,352	4,971,352	5	Entire System	2.76%	\$137,328
1997	51097256	Cornell Road	36,540	36,540	1	Cleveland Only	0.00%	\$0
1997	51097257	East 40th Street	3,750	3,750	1	Cleveland Only	0.00%	\$0
1997	51097258	Aetna Road	694,286	694,286	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Consumption

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
1997	51097259	Bessemer Ave. (E.65th - E.88th)	38,982	38,982	1	Cleveland Only	0.00%	\$0
1997	51097260	E. 55th St. - Phase I	129,137	129,137	1	Cleveland Only	0.00%	\$0
1997	51097261	East 200th Street	0	0	1	Cleveland Only	0.00%	\$0
1997	51097262	E. 123rd, Arlington & E. 125th	114,173	114,173	1	Cleveland Only	0.00%	\$0
1997	51097263	Cleaning & Lining Distribution Mains	5,796,505	5,796,505	1	Cleveland Only	0.00%	\$0
1997	w97264	PEP Phase I - Design	72,604,503	70,898,446	5	Entire System	2.76%	\$1,958,499
1997	51097266	Nottingham Pump Header Rehab	0	0	3	Eastern Suburbs	0.00%	\$0
1997	51097267	Nottingham Boiler Replacement	568,433	568,433	3	Eastern Suburbs	0.00%	\$0
1997	51097268	Water Vehicles - 1997	2,122,364	2,122,364	6	Undetermined/Unqualified	0.00%	\$0
1998	51098271	Kinsman Water Tower Rehabilitation	2,771,462	2,771,462	3	Eastern Suburbs	0.00%	\$0
1998	51098272	Clean & Line Distribution Mains - 1999	4,661,095	4,661,095	1	Cleveland Only	0.00%	\$0
1998	51098273	Rosewood Avenue	96,800	96,800	1	Cleveland Only	0.00%	\$0
1998	51098274	Dale Avenue	0	0	1	Cleveland Only	0.00%	\$0
1998	51098275	West Superior Road Water Main	505,988	505,988	1	Cleveland Only	0.00%	\$0
1998	51098276	Cost of Issuance - Series I Bonds	788,721	788,721	5	Entire System	2.76%	\$21,788
1998	51098277	Tower Painting and Maintenance	12,523,813	12,523,813	5	Entire System	2.76%	\$345,956
1998	51098278	Trunk Main Cleaning & Lining - Area 98-T2	1,553,255	1,553,255	5	Entire System	2.76%	\$42,907
1998	51098279	New Generator for Pearl Road Pump Station	0	0	4	Pearl Only	0.00%	\$0
1998	51098280	Water Vehicles - 1998	2,226,506	2,226,506	6	Undetermined/Unqualified	0.00%	\$0
1999	51099281	Brookpark Water Main Relocation	254,333	254,333	2	Western Suburbs	8.65%	\$21,995
1999	51099282	Chlorine Ton Cylinder Handling	296,175	296,175	5	Entire System	2.76%	\$8,181
1999	51099283	Lee Road Rehabilitation	230,071	230,071	1	Cleveland Only	0.00%	\$0
1999	51099284	Cleveland Business Park West	496,447	496,447	1	Cleveland Only	0.00%	\$0
1999	51099285	Orchard Park Housing Development	341,914	341,914	1	Cleveland Only	0.00%	\$0
1999	51099286	Euclid Creek Erosion	608,680	608,680	3	Eastern Suburbs	0.00%	\$0
1999	51099287	Replace Water Pump Impellers	0	0	6	Undetermined/Unqualified	0.00%	\$0
1999	51099288	Repair Ball Valve for Pump	0	0	6	Undetermined/Unqualified	0.00%	\$0
1999	51099289	East 55th Street - Phase II	13,685	13,685	1	Cleveland Only	0.00%	\$0
1999	51099290	East 40th Street - Phase III	40,855	40,855	1	Cleveland Only	0.00%	\$0
1999	51099291	East 55th Street - Phase III	57,370	57,370	1	Cleveland Only	0.00%	\$0
1999	51099292	Water Vehicles - 1999	1,671,404	1,671,404	6	Undetermined/Unqualified	0.00%	\$0
2000	51000300	Renovation at Charles Carr Municipal Center	1,248	1,248	1	Cleveland Only	0.00%	\$0
2000	51000301	Clean & Line Water Mains - 2000	5,557,296	5,557,296	1	Cleveland Only	0.00%	\$0
2000	51000302	Denison Ave. Bridge - 12" & 30" Water Mains	280,000	280,000	10	Western City and Suburbs	6.45%	\$18,058
2000	51000303	Replace Pump Units at Crown & Morgan	0	0	2	Western Suburbs	8.65%	\$0
2000	51000304	Water Main Repairs Specials	0	0	5	Entire System	2.76%	\$0
2000	51000305	Filter Turbidimeters & Particle Counters	0	0	5	Entire System	2.76%	\$0
2000	51000306	E. 40th Street - Phase II	0	0	1	Cleveland Only	0.00%	\$0
2000	w00310	Morgan Pump Station	46,823,702	46,823,702	10	Western City and Suburbs	6.45%	\$3,019,829
2000	51000311	Baldwin Filter Improvements	34,124,902	34,124,902	11	Eastern City and Suburbs	0.00%	\$0
2000	51000312	Nottingham Filter Improvements	23,530,126	23,530,126	11	Eastern City and Suburbs	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Consumption

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2000	51000313	Rehab E. 110 St.	29,128	29,128	1	Cleveland Only	0.00%	\$0
2000	51000314	Rehab W. 110 St.	13,421	13,421	1	Cleveland Only	0.00%	\$0
2000	51000315	E. 40th Street Phase III	0	0	1	Cleveland Only	0.00%	\$0
2000	51000316	Kirtland Intake Crib Painting	672,860	672,860	11	Eastern City and Suburbs	0.00%	\$0
2000	51000318	W. 22 St. & W. 23 St	0	0	1	Cleveland Only	0.00%	\$0
2000	51000319	Rowley Ave. Sewer - W. 14 to W. 17	16,687	16,687	1	Cleveland Only	0.00%	\$0
2000	51000320	Water Main Rehab - 2001	6,434,559	6,434,559	1	Cleveland Only	0.00%	\$0
2000	51000325	Water Vehicles - 2000	1,904,498	1,904,498	6	Undetermined/Unqualified	0.00%	\$0
2000	51000326	Euclid Corridor - Water Main Replacement	17,160,355	17,160,355	1	Cleveland Only	0.00%	\$0
2001	51001330	Garrett Morgan Museum	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001331	Naples Ave.-E. 153 St.-West End	0	0	1	Cleveland Only	0.00%	\$0
2001	51001332	State Road	49,300	49,300	1	Cleveland Only	0.00%	\$0
2001	51001333	Longwood Apartments	828,410	828,410	1	Cleveland Only	0.00%	\$0
2001	51001336	Water Main Specials	4,203,931	4,203,931	5	Entire System	2.76%	\$116,129
2001	51001337	South Water Mains (Design)	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001339	Kirtland's Motor Rewiring	0	0	11	Eastern City and Suburbs	0.00%	\$0
2001	51001340	Impellers & Associated Items (Crown/Morgan)	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001341	Repair Morgan Rapid Mix Sluice Gate	163,803	163,803	10	Western City and Suburbs	6.45%	\$10,564
2001	51001343	Repair of Crown Sludge Dome	91,500	91,500	2	Western Suburbs	8.65%	\$7,913
2001	51001344	Residuals Handling System @ Garrett Morgan	0	0	10	Western City and Suburbs	6.45%	\$0
2001	51001345	Engineering/Environmental Consulting	164,311	164,311	6	Undetermined/Unqualified	0.00%	\$0
2001	51001346	Central Ave. Rehab Project	23,115	23,115	1	Cleveland Only	0.00%	\$0
2001	51001347	E. 79th St. Rehabilitation Project	43,181	43,181	1	Cleveland Only	0.00%	\$0
2001	51001348	West 159th St. & Melbourne Sewer	12,693	12,693	1	Cleveland Only	0.00%	\$0
2001	51001349	West 31st St. Reconstruction	86,097	86,097	1	Cleveland Only	0.00%	\$0
2001	51001351	Watermain Rehab for Year 2002	6,692,124	6,692,124	1	Cleveland Only	0.00%	\$0
2001	51001352	Nottingham Chemical Project	20,522,522	20,522,522	3	Eastern Suburbs	0.00%	\$0
2001	51001353	Crown Residuals Press Rehab	1,288,020	1,288,020	2	Western Suburbs	8.65%	\$111,389
2001	51001501	Equipment for Distribution Mains	273,000	273,000	5	Entire System	2.76%	\$7,541
2001	51001502	Varian Gas Chromatograph & Accessories	73,028	73,028	6	Undetermined/Unqualified	0.00%	\$0
2001	51001503	Spechtrometer and Accessories	87,709	87,709	5	Entire System	2.76%	\$2,423
2001	51001504	Distribution System Instruments	72,309	72,309	5	Entire System	2.76%	\$1,997
2001	51001505	Manual Hand Chain Hoist	3,988	3,988	6	Undetermined/Unqualified	0.00%	\$0
2001	51001506	Motor Rewind Unit- Crown Plant	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001507	Ideal Motor Unit-Morgan Plant	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001508	HP Color Laser Jet Printer	5,300	5,300	6	Undetermined/Unqualified	0.00%	\$0
2001	51001509	Twin Roll Automatic Plain Paper	9,995	9,995	6	Undetermined/Unqualified	0.00%	\$0
2001	51001510	Electric Scissor Lift	9,100	9,100	6	Undetermined/Unqualified	0.00%	\$0
2001	51001511	Acer Milling Machine	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001513	Muelier D-5 Tap Machine	3,360	3,360	6	Undetermined/Unqualified	0.00%	\$0
2001	51001514	Computer Hardware	315,727	315,727	6	Undetermined/Unqualified	0.00%	\$0

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2001	51001515	Vehicles first responder program	89,163	89,163	6	Undetermined/Unqualified	0.00%	\$0
2001	51001516	2001 Motorized & Off Road Equipment	2,344,789	2,344,789	6	Undetermined/Unqualified	0.00%	\$0
2001	51001517	LAN Installation	0	0	5	Entire System	2.76%	\$0
2001	51001518	Installation & Testing LAN	785,756	785,756	5	Entire System	2.76%	\$21,706
2001	51001519	Yard Sweeper	42,704	42,704	6	Undetermined/Unqualified	0.00%	\$0
2001	w01520	Configuring, Monitoring, Troubleshooting	366,029	366,029	5	Entire System	2.76%	\$10,111
2001	51001521	Departmental Software CWD/CPP	597,089	597,089	6	Undetermined/Unqualified	0.00%	\$0
2001	51001522	Require K, Repair/Replacement SCADA	1,244,691	1,244,691	5	Entire System	2.76%	\$34,383
2001	51001523	Water Meter Testing Lab Improvements	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001524	Computer Hardware for Water	0	0	6	Undetermined/Unqualified	0.00%	\$0
2001	51001525	Fairmount Pump Station Motor	0	0	11	Eastern City and Suburbs	0.00%	\$0
2001	51001526	CWD Telephone System	0	0	6	Undetermined/Unqualified	0.00%	\$0
2002	51002360	Kinsman Road	1,349,616	1,349,616	1	Cleveland Only	0.00%	\$0
2002	51002361	Western Avenue	166,619	166,619	1	Cleveland Only	0.00%	\$0
2002	51002363	Fairway Ave. Sewer Project	0	0	1	Cleveland Only	0.00%	\$0
2002	w02364	Security Contracts Professional Services	32,456,453	32,254,897	5	Entire System	2.76%	\$891,005
2002	51002365	Kirtland Crib Navigation Rehab	0	0	11	Eastern City and Suburbs	0.00%	\$0
2002	51002366	Water Tank Inspection Cycle E	87,091	87,091	6	Undetermined/Unqualified	0.00%	\$0
2002	51002367	Chlorine Monitors	0	0	6	Undetermined/Unqualified	0.00%	\$0
2002	51002368	Floor Crack Repair	0	0	1	Cleveland Only	0.00%	\$0
2002	51002370	Baldwin Chemical Project	29,760,868	29,760,868	11	Eastern City and Suburbs	0.00%	\$0
2002	51002371	Taft Ave. Sewer Replacement	87,564	87,564	1	Cleveland Only	0.00%	\$0
2002	51002372	General Engineering Services	1,947,386	1,947,386	6	Undetermined/Unqualified	0.00%	\$0
2002	51002373	Hurston Court Water Main	130,000	130,000	1	Cleveland Only	0.00%	\$0
2002	51002375	Water Main Rehab for 2003	5,487,570	5,487,570	1	Cleveland Only	0.00%	\$0
2002	w02376	Roof Repair and Replacement	4,855,000	4,492,797	5	Entire System	2.76%	\$124,108
2002	51002377	Rockwell Ave. Water Main	374,429	374,429	1	Cleveland Only	0.00%	\$0
2002	w02380	PEP Program Management Phase II	30,452,555	30,452,542	5	Entire System	2.76%	\$841,217
2002	51002530	Financial Information Budget Software	750,749	750,749	5	Entire System	2.76%	\$20,739
2002	w02531	Electronic Document Management System	1,036,415	1,003,415	5	Entire System	2.76%	\$27,718
2002	w02532	Work Management System	5,397,062	5,397,062	5	Entire System	2.76%	\$149,088
2002	w02533	Computer Hardware Peripherals	5,837,610	5,836,071	6	Undetermined/Unqualified	0.00%	\$0
2002	51002534	Off Road Motorized Equipment	30,168	30,168	6	Undetermined/Unqualified	0.00%	\$0
2002	51002535	Vehicles 2002	2,559,875	2,559,875	6	Undetermined/Unqualified	0.00%	\$0
2003	51003385	Carver Park Estates	193,922	193,922	1	Cleveland Only	0.00%	\$0
2003	51003386	Grayton Road/Puritas Ave.	56,729	56,729	1	Cleveland Only	0.00%	\$0
2003	51003387	Euclid Ave.	345,614	345,614	1	Cleveland Only	0.00%	\$0
2003	51003388	Westpark Ave./Lydian Ave. Sewer	247,708	247,708	1	Cleveland Only	0.00%	\$0
2003	51003389	Baldwin 500K Solar Power System	0	0	11	Eastern City and Suburbs	0.00%	\$0
2003	51003390	Memphis Ave. Rehab	100,000	100,000	1	Cleveland Only	0.00%	\$0
2003	51003392	West 105th Street	181,400	181,400	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Consumption

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2003	51003393	Arbor Park Village Ph. II	120,000	120,000	1	Cleveland Only	0.00%	\$0
2003	w03400	Secondary Station Re-Chlorination	590,407	590,407	6	Undetermined/Unqualified	0.00%	\$0
2003	51003401	Cleveland Business Park West W.M.	113,345	113,345	1	Cleveland Only	0.00%	\$0
2003	51003402	Mobile De-Chlorinating Unit	0	0	6	Undetermined/Unqualified	0.00%	\$0
2003	51003405	Water Main Rehab	6,175,763	6,175,763	1	Cleveland Only	0.00%	\$0
2003	51003406	UPS 1201 Lakeside	98,325	98,325	6	Undetermined/Unqualified	0.00%	\$0
2003	51003407	Denison Ave. Water Main Replacement	1,313,653	1,313,653	1	Cleveland Only	0.00%	\$0
2003	51003540	Vehicles 2003	964,185	964,185	6	Undetermined/Unqualified	0.00%	\$0
2003	51003541	Oracle Software License Fees	1,199,932	1,199,932	6	Undetermined/Unqualified	0.00%	\$0
2003	51003545	AMR Firefly Pilot Demonstration	200,000	200,000	6	Undetermined/Unqualified	0.00%	\$0
2003	51003546	System 311	100,000	100,000	6	Undetermined/Unqualified	0.00%	\$0
2003	w03559	CIS Assessment/Design & Implementation	36,300,965	34,640,205	5	Entire System	2.76%	\$956,896
2003	w03560	Datamatic Hardware & Software	864,510	864,510	5	Entire System	2.76%	\$23,881
2003	w03563	Various Engineering Prof. Services	781,857	781,857	6	Undetermined/Unqualified	0.00%	\$0
2003	w03565	Voice and Data	5,858,118	5,858,118	6	Undetermined/Unqualified	0.00%	\$0
2004	51004410	SCADA System	0	0	6	Undetermined/Unqualified	0.00%	\$0
2004	51004411	Berea Rd. (Triskett to Detroit)	690,190	690,190	1	Cleveland Only	0.00%	\$0
2004	51004412	Arbor Park Village Ph. III	0	0	1	Cleveland Only	0.00%	\$0
2004	51004413	S. Waterloo Rd.	10,129	10,129	1	Cleveland Only	0.00%	\$0
2004	51004414	Eat 93rd St. Miles Ave. Union	112,102	112,102	1	Cleveland Only	0.00%	\$0
2004	w04415	Nottingham Floc/Sed/Residuals	23,104,967	23,104,967	3	Eastern Suburbs	0.00%	\$0
2004	w04416	Pump & Motor Impellers - Various Stations	359,179	359,179	5	Entire System	2.76%	\$9,922
2004	51004417	Electrical Power Reliability	24,192,454	24,192,454	5	Entire System	2.76%	\$668,289
2004	51004418	Valley Road	251,394	251,394	1	Cleveland Only	0.00%	\$0
2004	w04420	General Engineering Services	3,704,381	3,704,381	6	Undetermined/Unqualified	0.00%	\$0
2004	51004421	Nottingham Backwash Clarifier	7,222,367	7,222,367	3	Eastern Suburbs	0.00%	\$0
2004	51004422	Brunswick System Improvements	3,250,000	3,250,000	4	Pearl Only	0.00%	\$0
2004	51004423	East 4th Street	55,000	55,000	1	Cleveland Only	0.00%	\$0
2004	51004425	Water Main Rehab 2005	6,151,459	6,151,459	1	Cleveland Only	0.00%	\$0
2004	51004427	Harvard Yards Building Improvements	1,387,713	1,387,713	5	Entire System	2.76%	\$38,334
2004	w04428	Water Plant Valves	168,196	168,196	5	Entire System	2.76%	\$4,646
2004	w04429	Nottingham Administration Building	5,047,445	4,976,450	3	Eastern Suburbs	0.00%	\$0
2004	w04430	Baldwin Rapid Mix	27,162,387	27,162,387	11	Eastern City and Suburbs	0.00%	\$0
2004	w04431	East 176th Street	0	0	1	Cleveland Only	0.00%	\$0
2004	w04570	Monitoring Capital Projects	1,309,710	1,217,335	5	Entire System	2.76%	\$33,627
2004	51004571	Network Back-Up at 205 St. Clair	960,300	960,300	5	Entire System	2.76%	\$26,527
2004	w04572	Switchgear & Motor Control Repairs	470,289	470,289	5	Entire System	2.76%	\$12,991
2004	w04580	Biological Testing Equipment	54,820	54,820	5	Entire System	2.76%	\$1,514
2004	w04581	Time & Attendance Workforce System (ADP)	385,553	385,553	6	Undetermined/Unqualified	0.00%	\$0
2004	51004582	Vehicles 2004	2,326,947	2,326,947	6	Undetermined/Unqualified	0.00%	\$0
2004	51004585	Lawn Mowers & Trailers	36,475	36,475	6	Undetermined/Unqualified	0.00%	\$0

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2004	51004586	Building & Furniture - Parma Control	0	0	8	2nd High, PV, and Pearl	0.00%	\$0
2004	w04587	Chemical Feeder Process Improvements	139,537	139,537	6	Undetermined/Unqualified	0.00%	\$0
2005	51005435	Crown Water Works Plant	133,964	133,964	2	Western Suburbs	8.65%	\$11,585
2005	51005436	Culvert under Courtland Blvd.	64,543	64,543	1	Cleveland Only	0.00%	\$0
2005	51005440	Morgan Filter Rehab Construction	26,225,323	26,225,323	10	Western City and Suburbs	6.45%	\$1,691,366
2005	w05441	Tower City Center Water Infrastructure	1,398,306	1,304,137	1	Cleveland Only	0.00%	\$0
2005	w05442	Cleaning & Cement Mortar Lining - 2006	4,828,442	4,828,442	1	Cleveland Only	0.00%	\$0
2005	51005443	Morgan Pump Station Demolition	1,727,411	1,727,411	10	Western City and Suburbs	6.45%	\$111,407
2005	51005444	West 44th Street Bridge	66,694	66,694	1	Cleveland Only	0.00%	\$0
2005	w05445	Microwave 800 MHz	0	0	6	Undetermined/Unqualified	0.00%	\$0
2005	w05446	Nottingham Pump Control	2,715,816	2,715,816	3	Eastern Suburbs	0.00%	\$0
2005	w05450	Meter Automation AMR -- Old- Large Meter Right Sizing	94,014,547	46,614,132	5	Entire System	2.76%	\$1,287,662
2005	51005590	Vehicles 2005	1,796,922	1,796,922	6	Undetermined/Unqualified	0.00%	\$0
2005	51005591	Computer Hardware & Software	0	0	6	Undetermined/Unqualified	0.00%	\$0
2006	w06451	Jennings Road Improvements	40,048	40,048	1	Cleveland Only	0.00%	\$0
2006	w06452	Morgan East Reservoir	39,129,223	39,129,223	10	Western City and Suburbs	6.45%	\$2,523,585
2006	w06453	Flats East Bank	0	0	1	Cleveland Only	0.00%	\$0
2006	w06455	Keller II Water Tower	4,358,000	4,276,142	4	Pearl Only	0.00%	\$0
2006	51006456	Fisher Road Restoration	57,500	57,500	1	Cleveland Only	0.00%	\$0
2006	51006457	Kirtland Crib - Steel Protection	84,080	84,080	11	Eastern City and Suburbs	0.00%	\$0
2006	w06458	Water Main Rehab 2007	5,781,833	5,781,833	1	Cleveland Only	0.00%	\$0
2006	w06459	Renovations 1201 Lakeside	2,050,000	1,503,054	5	Entire System	2.76%	\$41,520
2006	w06460	Warehouse Improvements Ph I & II	10,775,663	10,563,011	5	Entire System	2.76%	\$291,791
2006	w06461	General Engineering Services	2,888,735	2,888,735	6	Undetermined/Unqualified	0.00%	\$0
2006	w06592	Oracle Licenses	968,640	968,640	6	Undetermined/Unqualified	0.00%	\$0
2006	w06593	Distribution & Maintenance Equipment	329,860	329,860	6	Undetermined/Unqualified	0.00%	\$0
2006	w06594	Vehicles 2006	1,836,323	1,836,323	6	Undetermined/Unqualified	0.00%	\$0
2006	51006595	Office Furniture	0	0	6	Undetermined/Unqualified	0.00%	\$0
2006	w06596	Computer Hardware & Software	805,619	804,299	6	Undetermined/Unqualified	0.00%	\$0
2006	51006597	Plasma Mass Spectrometer	201,168	201,168	6	Undetermined/Unqualified	0.00%	\$0
2007	w07465	Raw Water Monitoring System	178,237	178,237	6	Undetermined/Unqualified	0.00%	\$0
2007	w07466	Crown Water Plant	24,579,400	13,126,815	10	Western City and Suburbs	6.45%	\$846,725
2007	w07467	Quincy Ave. Rehab	726,810	726,810	1	Cleveland Only	0.00%	\$0
2007	w07468	Karms Corner Underground Duct	172,426	84,743	1	Cleveland Only	0.00%	\$0
2007	w07469	Karms Corner Streetscape	26,110	26,110	1	Cleveland Only	0.00%	\$0
2007	w07470	West 150th St. Reconstruction	197,209	197,209	1	Cleveland Only	0.00%	\$0
2007	w07471	Cornell Road Bridge	197,065	197,065	1	Cleveland Only	0.00%	\$0
2007	w07472	Woodland Ave. & Kinsman Road	339,336	339,336	1	Cleveland Only	0.00%	\$0
2007	w07473	Kirtland Pump Station Rehab	17,327,102	17,302,602	11	Eastern City and Suburbs	0.00%	\$0
2007	w07474	Big Creek Watershed Stormwater	136,000	136,000	1	Cleveland Only	0.00%	\$0
2007	w07475	Water Main Rehab 2008	5,568,852	5,568,852	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Consumption

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2007	w07476	Fairmount Pump Station Rehab	22,246,927	22,199,169	11	Eastern City and Suburbs	0.00%	\$0
2007	w07477	Suburban Watermain Renewal - Year 1 - Year 5	45,000,000	40,913,620	17	Eastern City and Suburbs	0.00%	\$0
2007	w07478	Morgan Pretreatment and Residuals	40,805,768	39,857,013	10	Western City and Suburbs	6.45%	\$2,570,522
2007	w07479	Aetna Road Bridge	243,241	243,241	1	Cleveland Only	0.00%	\$0
2007	w07480	Sustainability Program	0	0	6	Undetermined/Unqualified	0.00%	\$0
2007	w07481	Trunk Main Renewal Program	0	0	6	Undetermined/Unqualified	0.00%	\$0
2007	w07482	Facilities Improvements	0	0	6	Undetermined/Unqualified	0.00%	\$0
2007	w07600	Vehicles 2007	2,985,506	2,985,506	6	Undetermined/Unqualified	0.00%	\$0
2007	w07601	Computer Hardware & Software	375,232	375,232	6	Undetermined/Unqualified	0.00%	\$0
2007	51007602	Citywide Permit System Hardware	82,584	82,584	6	Undetermined/Unqualified	0.00%	\$0
2008	w08483	Replace & rehab cranes @ Water Plants & P.S.	119,715	119,715	5	Entire System	2.76%	\$3,307
2008	51008484	Bellaire Road Rehabilitation - Ph. I	116,412	116,412	1	Cleveland Only	0.00%	\$0
2008	51008485	Avenue District: E. 12th St.-Lakeside to St. Clair	26,799	26,799	1	Cleveland Only	0.00%	\$0
2008	w08486	Rehabilitation of E. 30th St.	888,140	639,807	1	Cleveland Only	0.00%	\$0
2008	w08487	Bellaire Road Rehabilitation - Ph. II	85,374	85,374	1	Cleveland Only	0.00%	\$0
2008	w08488	Rehabilitation of Broadway Ave.	565,180	221,977	1	Cleveland Only	0.00%	\$0
2008	w08489	GIS Build-Out @ 205 St. Clair	240,685	240,685	5	Entire System	2.76%	\$6,649
2008	w08490	Water Tank Rehabilitation	7,226,554	6,967,774	5	Entire System	2.76%	\$192,477
2008	51008491	Roof Rehabilitation and Replacement at Non-Plant Facility	1,017,545	1,017,545	5	Entire System	2.76%	\$28,109
2008	51008492	Fencing at Green Rd. Pump Station	71,596	71,596	11	Eastern City and Suburbs	0.00%	\$0
2008	w08493	Aurora Rd. Pump Station & Water Mains	7,103,474	7,103,474	11	Eastern City and Suburbs	0.00%	\$0
2008	w08494	Cook Rd. Tower & Water Mains	0	0	6	Undetermined/Unqualified	0.00%	\$0
2008	w08495	The Avenues Phase 3	45,450	45,450	1	Cleveland Only	0.00%	\$0
2008	w08496	Water Main Rehab 2009	4,420,286	4,420,286	1	Cleveland Only	0.00%	\$0
2008	w08497	General Engineering Services - Phase V	3,452,545	3,442,890	6	Undetermined/Unqualified	0.00%	\$0
2008	w08498	Baldwin Residuals & Reservoir	17,207,616	16,511,532	11	Eastern City and Suburbs	0.00%	\$0
2008	w08499	Brecksville Distribution Water Quality Improvements	228,679	215,680	12	Eastern City and Suburbs	0.00%	\$0
2008	51008603	Replacement of Turbidimeters	30,240	30,240	5	Entire System	2.76%	\$835
2008	w08604	Vehicles 2008	755,941	755,941	6	Undetermined/Unqualified	0.00%	\$0
2008	w08605	Payment Remittance Processing	450,000	414,034	5	Entire System	2.76%	\$11,437
2008	51008606	Gas Chromatograph & Apperlenances	62,011	62,011	5	Entire System	2.76%	\$1,713
2008	51008607	Replacement of Large Valve Actuators for Independent	40,000	40,000	6	Undetermined/Unqualified	0.00%	\$0
2008	w08608	Replacement of Large Valve Actuators for Independent	53,000	47,625	5	Entire System	2.76%	\$1,316
2008	w08609	2008 Computer Hardware and Software	1,243,684	1,243,223	6	Undetermined/Unqualified	0.00%	\$0
2009	w09100	West 77th Street Bridge	108,310	108,310	1	Cleveland Only	0.00%	\$0
2009	w09101	Detroit Ave. Streetscape	91,642	91,642	6	Undetermined/Unqualified	0.00%	\$0
2009	w09102	Property Acquisition @ 4204 Harvard Ave.	68,000	68,000	5	Entire System	2.76%	\$1,878
2009	w09103	Rehabilitation of Superior Ave.	965,131	690,006	1	Cleveland Only	0.00%	\$0
2009	w09104	Rehabilitation of Central Ave.	227,000	205,910	1	Cleveland Only	0.00%	\$0
2009	w09105	South Woodland Express Main	873,329	873,329	11	Eastern City and Suburbs	0.00%	\$0
2009	w09106	Morgan Chemical Facility	17,521,405	17,078,064	10	Western City and Suburbs	6.45%	\$1,101,426

Capital Projects Listing - Westlake Allocation by Consumption

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2009	w09107	Energy Mangement	2,000,000	0	6	Undetermined/Unqualified	0.00%	\$0
2009	w09108	Cedar Road Reconstruction	1,232,000	999,625	11	Eastern City and Suburbs	0.00%	\$0
2009	w09109	Watermain Rehabilitation 2010	6,557,248	5,445,013	1	Cleveland Only	0.00%	\$0
2009	w09110	Harvard Yards Facility Modifications	867,315	663,096	5	Entire System	2.76%	\$18,317
2009	w09111	Aurora Rd. Pump Station Engineering Services	0	0	11	Eastern City and Suburbs	0.00%	\$0
2009	w09112	Old River Channel Bulkheads	0	0	1	Cleveland Only	0.00%	\$0
2009	w09610	Automated Vehicle Location System	540,585	378,335	6	Undetermined/Unqualified	0.00%	\$0
2009	w09611	Vehicles 2009	2,498,471	1,552,489	6	Undetermined/Unqualified	0.00%	\$0
2010	w10113	Transmission Main Renewal Program	8,000,000	1,951,964	5	Entire System	2.76%	\$53,921
2010	w10114	Municipal Solid Waste Energy Project	0	0	6	Undetermined/Unqualified	0.00%	\$0
2010	w10115	Lorain Avenue Resurfacing	29,525	0	1	Cleveland Only	0.00%	\$0
2010	w10116	General Engineering Services Ph. VI	3,296,166	2,746,868	6	Undetermined/Unqualified	0.00%	\$0
2010	w10117	Martin Luther King Blvd.	402,000	135,619	1	Cleveland Only	0.00%	\$0
2010	w10118	E. 88th/Crane/E.91st Reconstruction	408,000	212,525	1	Cleveland Only	0.00%	\$0
2010	w10119	Security Upgrades & Improvements	284,995	278,190	5	Entire System	2.76%	\$7,685
2010	w10120	Lakefront West Pedestrian Tunnels	14,290	14,290	1	Cleveland Only	0.00%	\$0
2010	w10122	E. 93rd St. Bridge Rehab	16,147	0	1	Cleveland Only	0.00%	\$0
2010	w10123	Water Main Rehabilitation 2011	3,000,000	1,715,540	1	Cleveland Only	0.00%	\$0
2010	w10124	Bessemer Avenue Phase 2A	293,241	293,241	1	Cleveland Only	0.00%	\$0
2010	w10612	Computer Hardware & Software 2010	338,000	337,563	6	Undetermined/Unqualified	0.00%	\$0
2010	w10613	Security/CNL Project	40,000	40,000	5	Entire System	2.76%	\$1,105
2010	w10614	Major Repair & Upgrade of Nottingham Basin Chain Sy	120,000	119,505	11	Eastern City and Suburbs	0.00%	\$0
2010	w10615	TASC Cubicles	15,000	13,964	6	Undetermined/Unqualified	0.00%	\$0
2010	w10616	GIS SAN	165,719	165,719	5	Entire System	2.76%	\$4,578
2011	w11125	Morgan Raw Water Pump Station Improvements	5,733,200	5,406,803	10	Western City and Suburbs	6.45%	\$348,704
2011	w11126	E. 78th St. Relocation	16,000	0	1	Cleveland Only	0.00%	\$0
2011	w11127	Water Main Rehabilitation 2012	3,105,000	1,905,138	1	Cleveland Only	0.00%	\$0
2011	w11128	Morgana Run-Phase 1: E. 71st Street	290,377	290,377	1	Cleveland Only	0.00%	\$0
2011	c11210	Madison Ave. Rehabilitation	0	0	1	Cleveland Only	0.00%	\$0
2011	c11203	Cedar Ave. (E. 89th St. to MLK Blvd.)	0	0	1	Cleveland Only	0.00%	\$0
2011	c11216	SR 87 (Woodland Ave.) Rehabilitation (E. 55th St. to E	0	0	1	Cleveland Only	0.00%	\$0
2011	w11132	1825 Lakeside Avenue Improvements	210,000	134,202	5	Entire System	2.76%	\$3,707
2011	w11133	Detroit Avenue Streetscape (West 73rd to West 58th)	8,400	0	1	Cleveland Only	0.00%	\$0
2011	w11134	Ackley/Union/Broadway	13,092	0	1	Cleveland Only	0.00%	\$0
2011	w11135	Fulton Road from Denison to Clark	237,150	220,929	1	Cleveland Only	0.00%	\$0
2011	w11617	Computer Hardware	152,486	152,262	6	Undetermined/Unqualified	0.00%	\$0
2011	w11618	Street Restoration - 2011	50,000	0	1	Cleveland Only	0.00%	\$0
2011	w11619	Purchase of Laboratory Equipment	100,000	0	6	Undetermined/Unqualified	0.00%	\$0
2012	w12136	Lakeshore Blvd. Resurfacing	16,450	0	1	Cleveland Only	0.00%	\$0
2012	w12137	Cedar Avenue (E. 55th to E. 89th)	476,471	2,864	1	Cleveland Only	0.00%	\$0
2012	w12138	Waterloo Road Reconstruction	354,375	0	1	Cleveland Only	0.00%	\$0

Capital Projects Listing - Westlake Allocation by Consumption

Year	Project Number	Description	Current Appropriation	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Benefit Value to Westlake
2012	w12139	General Engineering Services VII	3,510,560	16,884	6	Undetermined/Unqualified	0.00%	\$0
2012	w12140	Fleet Avenue	418,638	0	1	Cleveland Only	0.00%	\$0
2012	w12141	Control Systems Rehab	240,000	125,187	5	Entire System	2.76%	\$3,458
2012	w12142	Triskett Avenue Rehab	257,875	0	1	Cleveland Only	0.00%	\$0
2012	w12143	Larchmere Blvd. Rehab	125,625	0	1	Cleveland Only	0.00%	\$0
2012	w12144	Madison/W. 61 St. Bridge	57,520	57,520	1	Cleveland Only	0.00%	\$0
2012	w12145	West 74th St. Bridge	32,730	32,730	1	Cleveland Only	0.00%	\$0
2012	w12146	800 MHz Radio	2,819,933	2,819,933	5	Entire System	2.76%	\$77,897
2012	w12147	800 MHz Radio "A"	3,460,622	3,257,991	5	Entire System	2.76%	\$89,998
2012	w12148	Brainard Road Express Main	3,500,000	0	15	Eastern City and Suburbs	0.00%	\$0
2012	w12149	Watermain Renewal 2013	7,700,866	0	1	Cleveland Only	0.00%	\$0
2012	w12150	Suburban Water Main Renewal Program Year 6 - Year 10	12,000,000	0	17	Eastern City and Suburbs	0.00%	\$0
2012	w12151	Quigley Avenue Water Main	90,000	89,934	1	Cleveland Only	0.00%	\$0
2012	w12620	Distribution and Maintenance Equipment	207,342	22,875	5	Entire System	2.76%	\$632
2012	w12621	Computer Hardware 2012	462,100	453,998	5	Entire System	2.76%	\$12,541
2012	w12622	Vehicles 2012	2,462,500	1,149,995	6	Undetermined/Unqualified	0.00%	\$0
2012	w12624	Utility Vehicles (Gators)	77,200	76,604	6	Undetermined/Unqualified	0.00%	\$0
2012	w12625	1060 Lakeside Improvements	40,000	35,912	1	Cleveland Only	0.00%	\$0
2012	w12626	West 54th Street	64,103	44,050	1	Cleveland Only	0.00%	\$0
2013	w13152	Harvard Ave Bridge Rehabilitation	6,930	6,930	1	Cleveland Only	0.00%	\$0
2013	w13153	Woodland Ave. & Buckeye Rd Rehabilitation	125,200	0	1	Cleveland Only	0.00%	\$0
2013	w13155	Secondary Station Improvements Cycle F	4,433,000	0	5	Entire System	2.76%	\$122,457
2013	w13627	Portable Potable Water Dispensing Trailer	44,100	0	5	Entire System	2.76%	\$1,218
2013	w13628	Computer Hardware & Software 2013	184,139	0	5	Entire System	2.76%	\$5,087
		totals	1,939,103,586	1,818,173,154				51,397,355

Appendix B

Table 1
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Summary of Valuation

Allocation Method	Original Cost	Accumulated Depreciation	Original Cost Less Depreciation	Replacement Cost New	Accumulated Depreciation	Replacement Cost New Less Depreciation
Consumption	\$51,397,355	\$31,582,209	\$19,815,146	\$86,622,420	\$56,083,460	\$30,538,960
Network Inch-Miles	50,131,428	30,573,365	19,558,063	84,424,324	54,050,075	30,374,249
Network Miles	46,880,111	28,619,577	18,260,534	79,071,690	50,626,707	28,444,983
Average Asset Value	\$49,469,631	\$30,258,384	\$19,211,248	\$83,372,811	\$53,586,747	\$29,786,064

1 - Accumulated depreciation based on age of assets as of 2018

Appendix B

Table 2
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Consumption-Based Valuation

Cost: 1 = Current Approp.; 2 = Expend to Date

Year	Project Number	Description	Asset Type	Funding Source	Depreciation	Accumulated Depreciation	Original Cost	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Original Cost to Westlake	Age	Annual Depreciation to Westlake	Assigned Asset Life
1981		Meters	M		\$11,932		\$3,917,621	\$3,917,621	5	Entire System	2.76%	\$108,220	37	\$3,092	35
1982		Trunk Main Ridge Rd.	TM		\$10,767		\$753,685	\$753,685	2	Western Suburbs	8.65%	\$65,179	36	\$931	70
1982		Increase First High Service	DO		\$2,471		\$173,000	\$173,000	5	Entire System	2.76%	\$4,779	36	\$68	70
1982		Study for discharge piping	DO		\$47		\$3,258	\$3,258	6	Undetermined/Unqualified	0.00%	\$0	36	\$0	70
1983		Expand Crown Filter	TPG		\$650		\$22,736	\$22,736	2	Western Suburbs	8.65%	\$1,966	35	\$56	35
1983		Division Filter Study - Shu	TPG		\$2,535		\$88,711	\$88,711	10	Western City and Suburbs	6.45%	\$5,721	35	\$163	35
1983		Rehab Sub Electric Facilities	PSES		\$25,690		\$1,798,297	\$1,798,297	6	Undetermined/Unqualified	0.00%	\$0	35	\$0	43
1984		Cleaning & Relining Program	DM		\$14,900		\$491,693	\$491,693	5	Entire System	2.76%	\$13,582	34	\$412	33
1984		Piometer Survey of Distribution	MISC		\$8,638		\$604,640	\$604,640	5	Entire System	2.76%	\$16,702	34	\$239	70
1984		ODOT Force Account 1480	TM		\$32		\$2,210	\$2,210	6	Undetermined/Unqualified	0.00%	\$0	34	\$0	70
1984		Cleaning & Relining Mains by CWD	DM		\$19,491		\$1,364,375	\$1,364,375	5	Entire System	2.76%	\$37,689	34	\$538	70
1984		Cleaning & Relining Mains	DM		\$12		\$400	\$400	6	Undetermined/Unqualified	0.00%	\$0	34	\$0	33
1985		Preliminary Eng Division set	MISC		\$12		\$162,653	\$162,653	10	Undetermined/Unqualified	0.00%	\$0	33	\$0	45
1985		Replace Roofing System at Facility	TPG		\$196		\$6,855	\$6,855	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Restore Backwash Water Reservoir	TPG		\$29,113		\$2,037,884	\$2,037,884	5	Entire System	2.76%	\$56,294	33	\$804	70
1985		Clean & Relining Water mains	DM		\$521		\$36,483	\$36,483	5	Entire System	2.76%	\$1,008	33	\$14	70
1985		Crown Intake Restoration	SIST		\$18,668		\$1,642,811	\$1,642,811	2	Western Suburbs	8.65%	\$142,072	33	\$1,614	88
1985		Clean & Relining Supply Mains	DM		\$32,465		\$2,272,543	\$2,272,543	5	Entire System	2.76%	\$62,776	33	\$897	70
1985		Install Telemetering - Seven Hills	M		\$1		\$46	\$46	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Replace Roof-Radio Repair	BLD		\$889		\$39,990	\$39,990	5	Entire System	2.76%	\$1,105	33	\$25	45
1985		Clean & reline 85K Ft Mains	DM		\$44,512		\$3,115,850	\$3,115,850	5	Entire System	2.76%	\$86,072	33	\$1,230	70
1985		Electrification at Division	TPG		\$2		\$67	\$67	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Electrification at Division	TPG		\$790		\$27,654	\$27,654	10	Western City and Suburbs	6.45%	\$1,784	33	\$51	35
1985		New Filtration Facilities	TPG		\$743		\$25,999	\$25,999	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Consulting	MISC		\$3,726		\$122,953	\$122,953	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	33
1985		Crown Intake Ditching	SIST		\$1,795		\$157,970	\$157,970	2	Western Suburbs	8.65%	\$13,661	33	\$155	88
1985		Clean & Line Mains 1985	DM		\$33,946		\$2,376,236	\$2,376,236	5	Entire System	2.76%	\$65,641	33	\$938	70
1986		Division Rehabilitation	TPG		\$2,976,574		\$104,180,086	\$104,180,086	10	Western City and Suburbs	6.45%	\$6,718,949	32	\$191,970	35
1986		Division Rehabilitation/Professional services	MISC		\$327,547		\$10,809,067	\$10,809,067	10	Western City and Suburbs	6.45%	\$697,116	32	\$21,125	33
1986		Crown sludge Rehab	BLD		\$219,500		\$7,682,507	\$7,682,507	2	Western Suburbs	8.65%	\$664,391	32	\$18,983	35
1986		Crown Masonry Rehab	BLD		\$6,524		\$248,558	\$248,558	2	Western Suburbs	8.65%	\$21,496	32	\$478	45
1986		Piometer service	M		\$8,235		\$288,171	\$288,171	5	Entire System	2.76%	\$7,960	32	\$227	70
1986		Kirkland Parking Garage	PKEG		\$2,885		\$86,553	\$86,553	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	30
1986		Parma Control SCADA System	DM		\$53,613		\$1,340,333	\$1,340,333	5	Entire System	2.76%	\$37,025	32	\$1,481	25
1986		Clean & Relining Mains 1985	DM		\$53		\$3,712	\$3,712	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	70
1986		Water Main, Fulton- Denison	TM		\$731		\$51,202	\$51,202	2	Western Suburbs	8.65%	\$4,428	32	\$63	70
1986		Water Main, Fulton-Brecksville	TM		\$668		\$48,150	\$48,150	2	Western Suburbs	8.65%	\$4,164	32	\$59	70
1986		Engineering Study	MISC		\$94		\$3,118	\$3,118	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	30
1986		Crown Intake Restoration	SIST		\$254		\$22,739	\$22,739	2	Western Suburbs	8.65%	\$1,966	32	\$22	88
1986		Crown, Restore WW System	TPG		\$3,844		\$134,525	\$134,525	2	Western Suburbs	8.65%	\$11,634	32	\$332	35
1986		DPU Building	BLD		\$450		\$20,235	\$20,235	5	Entire System	2.76%	\$559	32	\$12	45
1986		Water Main, Various Culvert	DM		\$1,412		\$98,840	\$98,840	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	70
1986		Crown-Sprague Main Part 2	TM		\$52,200		\$3,653,992	\$3,653,992	2	Western Suburbs	8.65%	\$316,001	32	\$4,514	70
1986		Replace Tap Street & Div	TPG		\$124		\$4,353	\$4,353	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	30
1986		Crown - Sprague Main Part 1	TM		\$24,359		\$1,705,125	\$1,705,125	2	Western Suburbs	8.65%	\$147,461	32	\$2,107	70
1986		DPU Building, Replace Roof	BLD		\$2,748		\$123,664	\$123,664	5	Entire System	2.76%	\$3,416	32	\$76	45
1986		Cleaning & Lining Supply Main	TM		\$84,210		\$5,894,714	\$5,894,714	5	Entire System	2.76%	\$162,835	32	\$2,326	70
1986		Restore Reservoir Tank-Engle	PSDS		\$4,645		\$232,250	\$232,250	2	Western Suburbs	8.65%	\$20,085	32	\$402	50
1986		Painting Reservoir Tank-Engle	PSPT		\$2,323		\$69,680	\$69,680	2	Western Suburbs	8.65%	\$6,026	32	\$201	30
1986		Replace Tap Street- Division	TPG		\$7,915		\$277,015	\$277,015	10	Western City and Suburbs	6.45%	\$17,586	32	\$510	35
1986		Harvard Yard Property Expansion	NA		\$0		\$338,500	\$338,500	5	Entire System	2.76%	\$9,351	32	\$0	NA
1987		Aerial Photo and Surveys	MISC		\$912		\$30,086	\$30,086	5	Entire System	2.76%	\$831	31	\$25	33
1987		Replace Crown Flocculators	TPG		\$12,934		\$452,688	\$452,688	2	Western Suburbs	8.65%	\$39,149	31	\$1,119	35
1987		Crown-Sprague Main Part 3	TM		\$26,321		\$1,842,489	\$1,842,489	2	Western Suburbs	8.65%	\$159,340	31	\$2,276	70
1987		Replace Crown Boilers	TPG		\$8,519		\$298,178	\$298,178	2	Western Suburbs	8.65%	\$25,787	31	\$737	35
1987		Crown-Sprague Main Sec 1, 4A	TM		\$24,526		\$1,716,853	\$1,716,853	2	Western Suburbs	8.65%	\$148,475	31	\$2,121	70
1987		Crown-Sprague Main Sec 1, 4B	TM		\$32,344		\$2,264,082	\$2,264,082	2	Western Suburbs	8.65%	\$195,800	31	\$2,897	70
1987		Fulton - Brecksville Supply main Sec1	TM		\$42,961		\$3,007,297	\$3,007,297	2	Western Suburbs	8.65%	\$260,074	31	\$3,715	70
1987		Fulton - Brecksville Supply main Sec1	TM		\$42,783		\$2,994,824	\$2,994,824	2	Western Suburbs	8.65%	\$258,995	31	\$3,700	70
1987		Brookpark-Deering Supply Main	TM		\$76,877		\$5,381,391	\$5,381,391	2	Western Suburbs	8.65%	\$465,388	31	\$6,648	70
1987		Crown Low Service Supply Main	TM		\$4,957		\$346,964	\$346,964	2	Western Suburbs	8.65%	\$30,006	31	\$429	70
1987		Fulton-Denison-Bigark Supply Main	TM		\$68,835		\$4,818,473	\$4,818,473	2	Western Suburbs	8.65%	\$416,706	31	\$5,953	70
1987		Full-End Cleaning & Lining	DM		\$77,606		\$5,432,430	\$5,432,430	5	Entire System	2.76%	\$150,065	31	\$2,144	70
1987		Division-Farmington Boiler Replacement	TPG		\$21,854		\$764,904	\$764,904	5	Entire System	2.76%	\$21,130	31	\$604	35
1987		Aerial Photo Mapping Survey	MISC		\$9,802		\$323,474	\$323,474	5	Entire System	2.76%	\$8,936	31	\$271	33
1988	5108806	Harvard Yards - Professional Services	MISC		\$58,438		\$1,928,444	\$1,928,444	5	Entire System	2.76%	\$53,271	30	\$1,614	33
1988		Crown Plant Neutralization System	TPG		\$2,916		\$102,073	\$102,073	2	Western Suburbs	8.65%	\$8,827	30	\$252	35
1988		Division Dam Board Installation	SO		\$3,604		\$108,112	\$108,112	10	Western City and Suburbs	6.45%	\$6,973	30	\$232	30
1988		Rehabilitation Harvard Yards Prof. Serv	NA		\$56,830		\$1,875,405	\$1,875,405	5	Entire System	2.76%	\$38,678	30	\$568	35
1988		Pump Station Battery Installation	PSES		\$1,001		\$43,022	\$43,022	6	Undetermined/Unqualified	0.00%	\$0	30	\$0	43
1988		Meter Bldg at Crown Plant	BLD		\$698		\$31,393	\$31,393	2	Western Suburbs	8.65%	\$2,715	30	\$60	45
1988		1989 Cleaning & Relining Program	DM		\$138,537		\$9,697,620	\$9,697,620	5	Entire System	2.76%	\$267,886	30	\$3,827	70
1988		Install Cathod Protect Sys	PSES		\$5,700		\$245,110	\$245,110	5	Entire System	2.76%	\$6,771	30	\$157	43
1989	5108900	Refine Liquid Alum Tanks	TPCS		\$13,266		\$198,990	\$198,990	6	Undetermined/Unqualified	0.00%	\$0	29	\$0	15
1989	5108902	Remove/Replace PCBs Detector	PSES		\$6,701		\$288,163	\$288,163	6	Undetermined/Unqualified	0.00%	\$0	29	\$0	15
1989	5108903	Parma Control Ctr Renovation	PSES		\$172,848	\$3,405,728	\$7,432,481	\$7,432,481	5	Entire System	2.76%	\$205,314	29	\$4,775	43
1989	5108904	Harvard Yards - Construction	PSG		\$1,041,485	\$0	\$31,244,542	\$31,244,542	5	Entire System	2.76%	\$863,095	29	\$28,770	30
1989	5108906	Repair Twin Conduit at Division	PSES		\$14,848		\$638,443	\$638,443	10	Western City and Suburbs	6.45%	\$41,175	29	\$958	43
1990	5109020	1990 Cleaning & Relining Program	DM		\$116,663		\$8,166,415	\$8,166,415	5	Entire System	2.76%	\$225,588	28	\$3,223	70
1990	5109024	Division - Northfield Road Imp.	BLD		\$852		\$38,321	\$38,321	6	Undetermined/Unqualified	0.00%	\$0	28	\$0	45
1990	5109026	Main Station Site Improvements	PSG		\$119,347		\$3,580,412	\$3,580,412	5	Entire System	2.76%	\$98,805	28	\$3,297	30
1990	5109028	Aerial Photo / MCOB, Bares	MISC		\$627		\$20,685	\$20,685	5	Entire System	2.76%	\$571	28	\$17	45
1990	5109030	Clean & Reline Trunk Mains 9	TM		\$81,079		\$5,675,529	\$5,675,529	5	Entire System	2.76%	\$156,780	28	\$2,240	70
1990	5109031	Division Surge Tank Insulation	TPG		\$2,398		\$83,930	\$83,930	10	Western City and Suburbs	6.45%	\$5,413	28	\$155	35
1990	5109032	Chlorine Detection Systems	TPCS		\$4,691		\$70,371	\$70,371	5	Entire System	2.76%	\$1,944	28	\$130	15
1990	5109037	Paint Dover & Brecksville Towers	PSPT		\$20,723		\$621,700	\$621,700	2	Western Suburbs	8.65%	\$53,765	28	\$1,792	30
1991	51091942	Relining Trunk Mains 91/92	TM		\$33,281		\$2,329,700	\$2,329,700	5	Entire System	2.76%	\$64,355	27	\$919	70
1991	51091945	Restored Various Water Mains	DM		\$40,919		\$2,864,343	\$2,864,343	6	Undetermined/Unqualified	0.00%	\$0	27	\$0	60
1991	51091946	Crown Plant Roof Replacement	BLD		\$4,390		\$197,540	\$197,540	2	Western Suburbs	8.65%	\$17,0			

Appendix B

Table 2
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Consumption-Based Valuation

Year	Project Number	Description	Cost Indices		Original Cost	Accum. Depreciation	Original Cost Less Depreciation	RCNLD Valuation		
			Current Date Value	Purchase Date Value				Replacement Cost New	Indexed Accum. Deprec.	Replacement Cost New Less Depreciation
1981		Meters	9.308	3.835	\$108,220	\$108,220	\$0	\$284,953.31	\$284,953	\$0
1982		Trunk Main Ridge Rd.	9.308	3.825	\$65,179	\$33,521	\$31,659	\$158,612	\$81,572	\$77,040
1982		Increase First High Service	9.308	3.825	\$4,779	\$2,458	\$2,321	\$11,629	\$5,981	\$5,649
1982		Study for discharge piping	9.308	3.825	\$0	\$0	\$0	\$0	\$0	\$0
1983		Expand Crown Filter	9.308	4.056	\$1,966	\$1,966	\$0	\$4,512	\$4,512	\$0
1983		Division Filter Study - Shru	9.308	4.056	\$5,721	\$5,721	\$0	\$13,130	\$13,130	\$0
1983		Rehab Sub Electric Facilities	9.308	4.056	\$0	\$0	\$0	\$0	\$0	\$0
1984		Cleaning & Relining Program	9.308	4.146	\$49,676	\$24,129	\$25,549	\$111,525	\$54,169	\$57,356
1984		Potometer Survey of Distribution	9.308	4.146	\$13,582	\$13,582	\$0	\$30,493	\$30,493	\$0
1984		ODOT Force Account 1480	9.308	4.146	\$16,702	\$8,113	\$8,590	\$37,498	\$18,213	\$19,285
1984		Cleaning & Relining Mains by CWD	9.308	4.146	\$0	\$0	\$0	\$0	\$0	\$0
1984		Cleaning & Relining Mains	9.308	4.146	\$37,689	\$18,306	\$19,383	\$84,615	\$41,099	\$43,516
1984		Preliminary Eng Division set	9.308	4.146	\$0	\$0	\$0	\$0	\$0	\$0
1985		Replace Roofing System at Facility	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Restore Backwash Water Reservoir	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Clean & Relining Water mains	9.308	4.195	\$56,294	\$26,539	\$29,756	\$124,907	\$58,885	\$66,022
1985		Clean & Relining Water mains	9.308	4.195	\$1,008	\$475	\$533	\$2,236	\$1,054	\$1,182
1985		Crown Intake Restoration	9.308	4.195	\$142,072	\$53,277	\$88,795	\$315,234	\$118,213	\$197,021
1985		Clean & Relining Supply Mains	9.308	4.195	\$62,776	\$29,595	\$33,182	\$139,290	\$65,665	\$73,625
1985		Install Telemetering - Seven Hills	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Replace Roof-Radio Repair	9.308	4.195	\$1,105	\$810	\$295	\$2,451	\$1,797	\$654
1985		Clean & relne 85K Ft Mains	9.308	4.195	\$86,072	\$40,577	\$45,495	\$190,979	\$90,033	\$100,946
1985		Electrification at Division	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Electrification at Division	9.308	4.195	\$1,784	\$1,682	\$102	\$3,957	\$3,731	\$226
1985		New Filtration Facilities	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Consulting	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Crown Intake Diving	9.308	4.195	\$13,661	\$5,123	\$8,538	\$30,312	\$11,367	\$18,945
1985		Clean & Line Mains 1985	9.308	4.195	\$65,641	\$30,945	\$34,696	\$145,646	\$68,662	\$76,984
1986		Division Rehabilitation	9.308	4.295	\$6,718,949	\$6,143,039	\$575,910	\$14,561,112	\$13,313,017	\$1,248,095
1986		Division Rehabilitation/Professional services	9.308	4.295	\$697,116	\$675,991	\$21,125	\$1,510,769	\$1,464,988	\$45,781
1986		Crown sludge Rehab	9.308	4.295	\$664,391	\$607,443	\$56,948	\$1,439,849	\$1,316,433	\$123,416
1986		Crown Masonry Rehab	9.308	4.295	\$21,496	\$15,286	\$6,210	\$46,585	\$33,127	\$13,458
1986		Potometer services	9.308	4.295	\$7,960	\$7,278	\$682	\$17,252	\$15,773	\$1,479
1986		Kirtland Parking Garage	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Palma Control SCADA System	9.308	4.295	\$37,025	\$37,025	\$0	\$80,240	\$80,240	\$0
1986		Clean & Relining Mains 1985	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Water Main, Fulton- Denison	9.308	4.295	\$4,428	\$2,024	\$2,404	\$9,596	\$4,387	\$5,209
1986		Water Main, Fulton-Brackville	9.308	4.295	\$4,164	\$1,904	\$2,260	\$9,024	\$4,125	\$4,899
1986		Engineering Study	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Crown Intake Restoration	9.308	4.295	\$1,966	\$715	\$1,251	\$4,262	\$1,550	\$2,712
1986		Crown, Restore WW System	9.308	4.295	\$11,634	\$10,637	\$997	\$25,213	\$23,051	\$2,161
1986		DPU Building	9.308	4.295	\$559	\$397	\$161	\$1,211	\$861	\$350
1986		Water Main, Various Culvert	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Crown-Sprague Main Part 2	9.308	4.295	\$316,001	\$144,458	\$171,543	\$684,828	\$313,064	\$371,764
1986		Replace Tap Steers & DIV	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Crown - Sprague Main Part 1	9.308	4.295	\$147,461	\$67,411	\$80,050	\$319,573	\$146,091	\$173,483
1986		DPU Building, Replace Roof	9.308	4.295	\$3,416	\$2,429	\$987	\$7,403	\$5,265	\$2,139
1986		Cleaning & Lining Supply Main	9.308	4.295	\$162,835	\$74,439	\$88,396	\$352,891	\$161,321	\$191,569
1986		Restore Reservoir Tank-Engle	9.308	4.295	\$20,085	\$12,855	\$7,231	\$43,528	\$27,858	\$15,670
1986		Painting Reservoir Tank-Engle	9.308	4.295	\$6,026	\$6,026	\$0	\$13,059	\$13,059	\$0
1986		Replace Tap Steers-Division	9.308	4.295	\$17,866	\$16,334	\$1,531	\$38,718	\$35,399	\$3,319
1986		Harvard Yard Property Expansion	9.308	4.295	\$9,351	\$0	\$9,351	\$20,265	\$0	\$20,265
1987		Aerial Photo and Surveys	9.308	4.406	\$831	\$781	\$50	\$1,756	\$1,649	\$106
1987		Replace Crown Flocculators	9.308	4.406	\$39,149	\$34,675	\$4,474	\$82,705	\$73,253	\$9,452
1987		Crown-Sprague Main Part 3	9.308	4.406	\$159,340	\$70,565	\$88,775	\$336,618	\$149,074	\$187,544
1987		Replace Crown Boilers	9.308	4.406	\$25,787	\$22,840	\$2,947	\$54,476	\$48,251	\$6,226
1987		Crown-Sprague Main Sec 1 4A	9.308	4.406	\$148,475	\$65,753	\$82,722	\$313,665	\$138,908	\$174,756
1987		Crown-Sprague Main Sec 1 4B	9.308	4.406	\$195,800	\$86,711	\$109,089	\$413,642	\$183,184	\$230,458
1987		Fulton -Brackville Supply main Sec1	9.308	4.406	\$260,074	\$115,176	\$144,898	\$549,426	\$243,317	\$306,109
1987		Fulton -Brackville Supply main Sec1	9.308	4.406	\$258,995	\$114,698	\$144,297	\$547,147	\$242,308	\$304,839
1987		Brookpark-Deering Supply Main	9.308	4.406	\$465,388	\$206,100	\$259,288	\$983,167	\$435,402	\$547,764
1987		Crown Low Service Supply Main	9.308	4.406	\$30,006	\$13,288	\$16,718	\$63,389	\$28,072	\$35,317
1987		Fulton-Denison-Bigark Supply Main	9.308	4.406	\$416,706	\$184,541	\$232,165	\$880,323	\$389,857	\$490,466
1987		1987 Cleaning & Lining	9.308	4.406	\$150,065	\$66,457	\$83,607	\$317,023	\$140,305	\$176,717
1987		Division-Farmount Boiler Replacement	9.308	4.406	\$21,130	\$18,715	\$2,415	\$44,638	\$39,536	\$5,101
1987		Aerial Photo Mapping Survey	9.308	4.406	\$8,936	\$8,394	\$542	\$18,877	\$17,733	\$1,144
1988	51088806	Harvard Yards - Professional Services	9.308	4.519	\$53,271	\$48,428	\$4,843	\$109,725	\$99,750	\$9,975
1988		Crown Plant Neutralization System	9.308	4.519	\$8,827	\$7,566	\$1,261	\$18,182	\$15,585	\$2,597
1988		Division Dam Board Installation	9.308	4.519	\$6,973	\$6,973	\$0	\$14,362	\$14,362	\$0
1988		Rehabilitation Harvard Yards Profit. Serv	9.308	4.519	\$0	\$0	\$0	\$0	\$0	\$0
1988		Pump Station Battery Installations	9.308	4.519	\$0	\$0	\$0	\$0	\$0	\$0
1988		Water Bldg at Crown Plant	9.308	4.519	\$2,715	\$1,810	\$905	\$5,592	\$3,728	\$1,864
1988		1989 Cleaning & Relining Program	9.308	4.519	\$267,886	\$114,808	\$153,078	\$551,777	\$236,476	\$315,301
1988		Install Cathod Protect Sys	9.308	4.519	\$6,771	\$4,724	\$2,047	\$13,946	\$9,730	\$4,216
1989	51089900	Reline Liquid Alum Tanks	9.308	4.815	\$0	\$0	\$0	\$0	\$0	\$0
1989	51089902	Remove/Replace PCB Capacitor	9.308	4.815	\$0	\$0	\$0	\$0	\$0	\$0
1989	51089903	Palma Control Ctr Renovation	9.308	4.815	\$205,314	\$138,467	\$66,846	\$396,897	\$267,675	\$129,222
1989	51089904	Harvard Yards - Construction	9.308	4.815	\$863,095	\$834,325	\$28,770	\$1,668,471	\$1,612,855	\$55,616
1989	51089908	Repair Twin Conduit at Division	9.308	4.815	\$41,175	\$27,770	\$13,406	\$79,597	\$53,682	\$25,915
1990	51090020	1990 Cleaning & Relining Program	9.308	4.732	\$225,588	\$90,235	\$135,353	\$443,739	\$177,496	\$266,243
1990	51090024	Division - Northfield Road Imp.	9.308	4.732	\$0	\$0	\$0	\$0	\$0	\$0
1990	51090026	Main Station Site Improvements	9.308	4.732	\$98,805	\$92,311	\$6,494	\$194,549	\$181,579	\$12,970
1990	51090028	Aerial Photo / Mapping Project	9.308	4.732	\$571	\$485	\$87	\$1,124	\$954	\$170
1990	51090030	Clean & Reline Trunk Mains 9	9.308	4.732	\$156,780	\$62,712	\$94,068	\$308,391	\$123,357	\$185,035
1990	51090031	Division Surge Tank Insulation	9.308	4.732	\$5,413	\$4,330	\$1,083	\$10,647	\$8,518	\$2,129
1990	51090032	Chlorine Detection Systems	9.308	4.732	\$1,944	\$1,944	\$0	\$3,824	\$3,824	\$0
1990	51090037	Paint Diver & Brackville Towers	9.308	4.732	\$53,765	\$50,181	\$3,584	\$105,758	\$98,707	\$7,051
1991	51091942	Relining Trunk Mains 91/92	9.308	4.835	\$64,355	\$24,823	\$39,533	\$123,892	\$47,767	\$76,105
1991	51091945	Rebuild Various Water Mains	9.308	4.835	\$0	\$0	\$0	\$0	\$0	\$0
1991	51091946	Crown Plant Roof Replacement	9.308	4.835	\$17,083	\$10,250	\$6,833	\$32,888	\$19,733	\$13,155
1991	51091950	Telecommunications Systems	9.308	4.835	\$20,390	\$20,390	\$0	\$39,254	\$39,254	\$0
2005		Telecommunication System	9.308	7.446	\$0	\$0	\$0	\$0	\$0	\$0
1996		Telecommunication System	9.308	5.620	\$0	\$0	\$0	\$0	\$0	\$0
1991	51091952	Crown Plant Drainage & Rehab	9.308	4.835	\$50,693	\$39,106	\$11,587	\$97,590	\$75,284	\$22,306
1991	51091953	Rehab Tap Water Screens 4	9.308	4.835	\$0	\$0	\$0	\$0	\$0	\$0
1991	51091955	Crown Plant Expansion Profit Sys	9.308	4.835	\$1,616,092	\$1,322,257	\$293,835	\$3,111,185	\$2,545,515	\$565,670
1992	51092960	800 Mhz Radio System-Professional Services	9.308	4.985	\$0	\$0	\$0	\$0	\$0	\$0
1992	51092965	Morgan Pump Bldg. Renovation	9.308	4.985	\$128,201	\$74,071	\$54,129	\$239,376	\$138,306	\$101,070
1992	51092966	Clean & Line Trunk Mains 92	9.308	4.985	\$59,241	\$22,004	\$37,237	\$110,614	\$41,085	\$69,529
1992	51092968	800 Mhz Radio System-Construction	9.308	4.985	\$0	\$0	\$0	\$0	\$0	\$0
1992	51092973	Lakewood 201 & 825 Lakewood Ave	9.308	4.985	\$538,633	\$311,152	\$227,481	\$1,005,556	\$580,984	\$424,566
1992	51092975	G. Morgan Pump Tank - Painting	9.308	4.985	\$9,616	\$8,334	\$1,282	\$17,955	\$15,561	\$2,394
1992	51092978	Clean & Line Trunk Mains 199	9.308	4.985	\$140,252	\$52,094	\$88,159	\$261,879	\$97,269	\$164,610
1992	51092980	Site Improvements Secondary Stations	9.308	4.985	\$17,851	\$15,471	\$2,380	\$33,332	\$28,888	\$4,444
1993	51093200	GIS - Professional Services	9.308	5.210	\$21,369	\$16,189	\$5,180	\$38,177	\$28,922	\$9,255
1993	51093201	Computer System Integrator Sys	9.308	5.210	\$84,796	\$84,796	\$0	\$151,493	\$151,493	\$0
1993	51093982	Clean & Line Trunk Mains 93	9.308	5.210	\$106,115	\$37,888	\$68,227	\$189,581	\$67,708	\$121,874
1993	51093983	Electronic Alarms for Stations	9.308	5.210	\$10,593	\$6,159	\$4,434	\$18,925	\$11,003	\$7,922
1993	51093985	Crown Expansion - Construction	9.308	5.210	\$9,686,252	\$6,918,751	\$2,767,500	\$17,305,1		

Appendix B

Table 2
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Consumption-Based Valuation

Cost: 1 = Current Approp.; 2 = Expend to Date

2

Year	Project Number	Description	Asset Type	Funding Source	Depreciation	Accumulated Depreciation	Original Cost	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Original Cost to Westlake	Age	Annual Depreciation to Westlake	Assigned Asset Life
1996	51096230	Harvard Avenue Bridge Water Main	TM		\$2,472		\$166,152	\$166,152	5	Entire System	2.76%	\$4,590	22	\$66	70
1996	51096232	Water Tank Inspection Program	PSG		\$4,774		\$140,148	\$140,148	5	Entire System	2.76%	\$3,871	22	\$129	30
1996	51096233	Parma Reservoir Rehab	SR		\$121,873		\$8,287,388	\$8,287,388	2	Western Suburbs	8.65%	\$716,702	22	\$10,540	68
1996	51096238	1996/1997 Trunk Main Cleaning & Lining	TM		\$40,739		\$2,851,756	\$2,851,756	5	Entire System	2.76%	\$78,777	22	\$1,125	70
1996	51096242	Demolish Various Non-Operative Stations	PSG		\$37,489		\$1,124,674	\$1,124,674	6	Undetermined/Unqualified	0.00%	\$0	22	\$0	30
1996	51096247	City-Wide GIS	CHS		\$7,101,977		\$35,509,886	\$35,509,886	5	Entire System	2.76%	\$980,920	22	\$196,184	5
1997	51097254	Hand Held Meter Reading System	M		\$53,220		\$1,862,704	\$1,862,704	5	Entire System	2.76%	\$51,455	21	\$1,470	35
1997	51097255	Distribution System Hydraulic Model	DO		\$71,037		\$4,971,352	\$4,971,352	5	Entire System	2.76%	\$137,328	21	\$1,962	70
1997	51097264	PEP Phase I - Design	TPG		\$2,074,414		\$72,604,503	\$70,898,446	5	Entire System	2.76%	\$1,958,489	21	\$57,303	35
1998	51098276	Cost of Issuance - Series I Bonds	BLD		\$17,527		\$788,721	\$788,721	5	Entire System	2.76%	\$21,788	20	\$484	45
1998	51098277	Tower Painting and Maintenance	PSPT		\$417,460		\$12,523,813	\$12,523,813	5	Entire System	2.76%	\$345,956	20	\$11,532	30
1998	51098278	Trunk Main Cleaning & Lining - Area 98-12	TM		\$22,189		\$1,553,255	\$1,553,255	5	Entire System	2.76%	\$42,907	20	\$613	70
1999	51099281	Brookpark Water Main Relocation	M		\$3,633		\$254,333	\$254,333	2	Western Suburbs	8.65%	\$21,995	19	\$314	70
1999	51099282	Chlorine Ton Vender Handling	TPCS		\$19,745		\$296,175	\$296,175	5	Entire System	2.76%	\$8,181	19	\$545	15
1999	51099287	Replace Water Pump Impellers	PSMS		\$1,600		\$40,000	\$42,000	6	Undetermined/Unqualified	0.00%	\$0	19	\$0	25
1999	51099288	Repair Ball Valve for Pump	PSMS		\$1,400		\$35,000	\$36,750	6	Undetermined/Unqualified	0.00%	\$0	19	\$0	25
2000	51000302	Denison Ave. Bridge - 12" & 30" Water Mains	TM		\$4,000		\$280,000	\$280,000	10	Western City and Suburbs	6.45%	\$18,058	18	\$258	70
2000	51000310	Morgan Pump Station	PSG		\$1,560,790		\$46,823,702	\$46,823,702	10	Western City and Suburbs	6.45%	\$3,019,829	18	\$100,661	30
2001	51001336	Water Main Specials	DM		\$60,056		\$4,203,931	\$4,203,931	5	Entire System	2.76%	\$116,129	17	\$1,659	70
2001	51001341	Repair Hagen Rapid Riv Sluice Gate	TPG		\$4,680		\$163,803	\$163,803	10	Western City and Suburbs	6.45%	\$10,564	17	\$302	35
2001	51001343	Repair of Crown Sludge Dome	TPG		\$2,614		\$91,500	\$91,500	2	Western Suburbs	8.65%	\$7,913	17	\$226	35
2001	51001345	Engineering/Environmental Consulting	MISC		\$4,979		\$164,311	\$164,311	6	Undetermined/Unqualified	0.00%	\$0	17	\$0	33
2001	51001353	Crown Residuals Press Rehab	TPG		\$36,801		\$1,288,020	\$1,288,020	2	Western Suburbs	8.65%	\$111,389	17	\$3,183	35
2001	51001501	Equipment for Distribution Mains	DO		\$3,900		\$273,000	\$273,000	5	Entire System	2.76%	\$7,541	17	\$108	70
2001	51001503	Spectrometer and Accessories	POE		\$3,813		\$87,709	\$87,709	5	Entire System	2.76%	\$2,423	17	\$105	23
2001	51001504	Distribution System Instruments	POE		\$3,144		\$72,309	\$72,309	5	Entire System	2.76%	\$1,997	17	\$87	23
2001	51001518	Installation & Testing LAN	CHS		\$157,151		\$785,756	\$785,756	5	Entire System	2.76%	\$21,706	17	\$4,341	5
2001	51001520	Configuring, Monitoring, Troubleshooting	MISC		\$11,092		\$366,029	\$366,029	5	Entire System	2.76%	\$10,111	17	\$306	33
2001	51001522	Require K, Repair/Replacement SCADA	ELEC		\$48,788		\$1,244,691	\$1,244,691	5	Entire System	2.76%	\$34,383	17	\$1,375	25
2002	51002364	Security Contracts Professional Services	MISC		\$983,529		\$32,456,453	\$32,456,453	5	Entire System	2.76%	\$891,005	16	\$27,169	33
2002	51002366	Water Tank Inspection Cycle E	PSPT		\$2,903		\$87,091	\$238,400	6	Undetermined/Unqualified	0.00%	\$0	16	\$0	30
2002	51002372	General Engineering Services	MISC		\$56,093		\$1,917,074	\$1,950,000	6	Undetermined/Unqualified	0.00%	\$0	16	\$0	33
2002	51002376	Roof Repair and Replacement	TPG		\$107,889		\$4,855,000	\$4,492,797	5	Entire System	2.76%	\$124,108	16	\$2,980	45
2002	51002380	PEP Program Management Phase II	MISC		\$922,805		\$30,452,555	\$30,452,542	5	Entire System	2.76%	\$841,217	16	\$25,491	33
2002	51002530	Financial Information Budget Software	MISC		\$22,750		\$750,749	\$750,749	5	Entire System	2.76%	\$20,739	16	\$628	33
2002	51002531	Electronic Document Management System	MISC		\$31,407		\$1,036,415	\$1,003,415	5	Entire System	2.76%	\$27,718	16	\$868	33
2002	51002532	Work Management System	MISC		\$163,547		\$5,397,062	\$5,397,062	5	Entire System	2.76%	\$149,088	16	\$4,518	33
2003	51003559	CIS Assessment/Design & Implementation	MISC		\$1,100,029		\$36,300,965	\$34,640,205	5	Entire System	2.76%	\$956,896	15	\$30,387	33
2003	51003560	Automatic Hardware & Software	MISC		\$8,828		\$864,510	\$864,510	5	Entire System	2.76%	\$23,881	16	\$4,776	5
2003	51003563	Various Engineering Prof. Services	MISC		\$23,693		\$781,857	\$781,857	6	Undetermined/Unqualified	0.00%	\$0	15	\$0	33
2004	51004416	Pump & Motor Impellers - Various Stations	PSMS		\$14,367		\$359,179	\$359,179	5	Entire System	2.76%	\$9,922	14	\$397	25
2004	51004417	Electrical Power Reliability	PSES		\$562,615		\$24,192,454	\$24,192,454	5	Entire System	2.76%	\$668,289	14	\$15,542	43
2004	51004420	General Engineering Services	MISC		\$112,254		\$3,704,381	\$3,704,381	6	Undetermined/Unqualified	0.00%	\$0	14	\$0	33
2004	51004427	Harvard Yards Building Improvements	PSG		\$46,257		\$1,387,713	\$1,387,713	5	Entire System	2.76%	\$38,334	14	\$1,278	30
2004	51004428	Water Tank Valve	BLD		\$6,728		\$168,196	\$168,196	5	Entire System	2.76%	\$4,646	14	\$166	25
2004	51004520	Monitoring Capital Projects	MISC		\$39,688		\$1,309,710	\$1,217,335	5	Entire System	2.76%	\$33,627	14	\$1,096	33
2004	51004571	Network Back-Up at 205 St. Clair	CHS		\$192,060		\$960,300	\$960,300	5	Entire System	2.76%	\$26,527	14	\$5,305	5
2004	51004572	Switchgear & Motor Control Repairs	POE		\$20,447		\$470,289	\$470,289	5	Entire System	2.76%	\$12,991	14	\$565	23
2004	51004580	Biological Testing Equipment	POE		\$2,383		\$54,820	\$54,820	5	Entire System	2.76%	\$1,514	14	\$66	23
2004	51004587	Chemical Feeder Process Improvements	TPCS		\$9,302		\$139,537	\$139,537	6	Undetermined/Unqualified	0.00%	\$0	14	\$0	15
2005	51005435	Crown Water Works Plant	PSG		\$3,828		\$133,964	\$133,964	2	Western Suburbs	8.65%	\$11,585	13	\$331	35
2005	51005440	Morgan Filter Rehab Construction	TPG		\$749,295		\$26,225,323	\$26,225,323	10	Western City and Suburbs	6.45%	\$1,691,366	13	\$48,325	35
2005	51005443	Morgan Pump Station Demolition	PSG		\$57,580		\$1,727,411	\$1,727,411	10	Western City and Suburbs	6.45%	\$111,407	13	\$3,714	30
2005	51005444	Meter Automation AMR - Old - Large Meter Right Sizing	M		\$2,686,130		\$94,014,547	\$46,614,132	5	Entire System	2.76%	\$1,287,662	13	\$74,201	35
2006	51006452	Morgan East Reservoir	SO	5229	\$1,304,307		\$39,129,223	\$39,129,223	10	Western City and Suburbs	6.45%	\$2,523,585	12	\$84,119	30
2006	51006452	Morgan East Reservoir	SO	5240	\$0		\$0	\$0	10	Western City and Suburbs	6.45%	\$0	12	\$0	30
2006	51006459	Renovations 1201 Lakeside	BLD	5080	\$45,656		\$2,060,000	\$1,503,054	5	Entire System	2.76%	\$41,520	12	\$1,258	45
2006	51006460	Warehouse Improvements Ph I & II	BLD	5225	\$239,459		\$10,775,663	\$10,563,011	5	Entire System	2.76%	\$291,791	12	\$6,615	45
2006	51006461	General Engineering Services	MISC	52001	\$87,537		\$2,888,735	\$2,888,735	6	Undetermined/Unqualified	0.00%	\$0	12	\$0	33
2007	51007465	Raw Water Monitoring System	SO	52001	\$5,941		\$178,237	\$178,237	6	Undetermined/Unqualified	0.00%	\$0	11	\$0	30
2007	51007466	Crown Water Plant	TPG	52229	\$702,269		\$24,579,400	\$13,128,815	10	Western City and Suburbs	6.45%	\$846,725	11	\$45,292	35
2007	51007478	Morgan Pretreatment and Residuals	TPG	52235	\$1,165,879		\$40,805,768	\$39,857,013	10	Western City and Suburbs	6.45%	\$2,570,522	11	\$75,192	35
2007	51007478	Morgan Pretreatment and Residuals	TPG	52412	\$0		\$0	\$0	10	Western City and Suburbs	6.45%	\$0	11	\$0	35
2007	51007481	Trunk Main Renewal Program	TM	52001	\$28,571		\$2,000,000	\$0	6	Undetermined/Unqualified	0.00%	\$0	11	\$0	70
2007	51007482	Facilities Improvements	BLD	52001	\$5,556		\$250,000	\$0	6	Undetermined/Unqualified	0.00%	\$0	11	\$0	45
2008	51008483	Replace & rehab cranes @ Water Plants & P.S.	POE	52001	\$5,205		\$119,715	\$119,715	5	Entire System	2.76%	\$3,307	10	\$144	23
2008	51008489	GIS Build-Out @ 205 St. Clair	CHS	52001	\$48,137		\$240,685	\$240,685	5	Entire System	2.76%	\$6,649	10	\$1,330	5
2008	51008490	Water Tank Rehabilitation	PSDS	52001	\$144,531		\$7,226,554	\$6,967,774	5	Entire System	2.76%	\$192,477	10	\$3,993	50
2008	51008490	Water Tank Rehabilitation	PSDS	52229	\$0		\$0	\$0	5	Entire System	2.76%	\$0	10	\$0	50
2008	51008491	Roof Rehabilitation and Replacement at Non-Plant Facilities	BLD	52001	\$22,612		\$1,017,545	\$1,017,545	5	Entire System	2.76%	\$28,109	10	\$625	45
2008	51008497	General Engineering Services - Phase V	MISC	52001	\$104,623		\$3,452,545	\$3,245,564	6	Undetermined/Unqualified	0.00%	\$0	10	\$0	33
2008	51008603	Replacement of Turbidimeters	TPG	52001	\$864		\$30,240	\$30,240	5	Entire System	2.76%	\$835	10	\$24	35
2008	51008605	Payment Remittance Processing	MISC	52001	\$13,636		\$450,000	\$414,034	5	Entire System	2.76%	\$11,437	10	\$377	33
2008	51008606	Gas Chromatograph & Appertences	TPCS	52001	\$4,134		\$62,011	\$62,011	5	Entire System	2.76%	\$1,713	10	\$114	15
2008	51008607	Replacement of Large Submersible Pumps at Various Stations	PSG	52001	\$1,333		\$40,000	\$40,000	6	Undetermined/Unqualified	0.00%	\$0	10	\$0	30
2008	51008608	Replacement of Large Valve Actuators for Independence S	PSG	52001	\$1,767		\$53,000	\$47,625	5	Entire System	2.76%	\$1,316	10	\$49	30
2009	51009102	Property Acquisition @ 4204 Harvard Ave.	NA	52001	\$0		\$68,000	\$68,000	5	Entire System	2.76%	\$1,878	9	\$0	NA
2009	51009106	Morgan Chemical Facility	TPCS	52229	\$1,168,094		\$17,521,405	\$17,078,064	10	Western City and Suburbs	6.45%	\$1,101,426	9	\$75,335	15
2009	51009106	Morgan Chemical Facility	TPCS	52235	\$0		\$0	\$0	10	Western City and Suburbs	6.45%	\$0	9	\$0	15
2009	51009107	Energy Management	PSES	52001	\$46,512		\$2,000,000	\$0	6	Undetermined/Unqualified	0.00%	\$0	9	\$0	43
2009	51009110	Harvard Yards Facility Modifications	PSG	52001	\$28,910		\$867,315	\$663,096	5	Entire System	2.76%	\$18,317	9	\$799	30
2010	w10113	Transmission Main Renewal Program	TM	52235	\$114,286		\$8,000,000	\$1,951,964	5	Entire System</					

Appendix B

Table 2
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Consumption-Based Valuation

Year	Project Number	Description	Cost Indices		Original Cost	Accum. Depreciation	Original Cost Less Depreciation	RCNLD Valuation		
			Current Date Value	Purchase Date Value				Replacement Cost New	Indexed Accum. Deprec.	Replacement Cost New Less Depreciation
1996	51096230	Harvard Avenue Bridge Water Main	9,308	5,620	\$4,590	\$1,442	\$3,147	\$7,602	\$2,389	\$5,213
1996	51096232	Water Tank Inspection Program	9,308	5,620	\$3,871	\$2,839	\$1,032	\$6,412	\$4,702	\$1,710
1996	51096233	Parma Reservoir Rehab	9,308	5,620	\$716,702	\$231,874	\$484,828	\$1,187,021	\$384,036	\$802,985
1996	51096236	1996/1997 Trunk Main Cleaning & Lining	9,308	5,620	\$78,777	\$24,578	\$54,018	\$130,472	\$41,005	\$89,466
1996	51096242	Demolish Various Non-Operative Stations	9,308	5,620	\$0	\$0	\$0	\$0	\$0	\$0
1996	51096247	City-Wide GIS	9,308	5,620	\$980,920	\$980,920	\$0	\$1,624,627	\$1,624,627	\$0
1997	51097254	Hand Held Meter Reading System	9,308	5,825	\$51,455	\$30,873	\$20,582	\$62,222	\$49,333	\$32,889
1997	51097255	Distribution System Hydraulic Model	9,308	5,825	\$137,328	\$41,198	\$96,130	\$219,442	\$65,833	\$153,609
1997	51097264	PEP Phase I - Design	9,308	5,825	\$1,958,489	\$1,175,093	\$783,395	\$3,129,547	\$1,877,728	\$1,251,819
1998	51098276	Cost of Issuance - Series I Bonds	9,308	5,920	\$21,788	\$9,683	\$12,104	\$34,256	\$15,225	\$19,031
1998	51098277	Tower Painting and Maintenance	9,308	5,920	\$345,956	\$230,637	\$115,319	\$543,946	\$362,630	\$181,315
1998	51098278	Trunk Main Cleaning & Lining - Area 98-12	9,308	5,920	\$42,907	\$12,259	\$30,648	\$67,462	\$19,275	\$48,187
1999	51099281	Brookpark Water Main Relocation	9,308	6,060	\$21,995	\$5,970	\$16,025	\$33,784	\$9,170	\$24,614
1999	51099282	Chlorine-Ton Visker Handling	9,308	6,060	\$8,181	\$8,181	\$0	\$12,567	\$12,567	\$0
1999	51099287	Replace Water Pump Impellers	9,308	6,060	\$0	\$0	\$0	\$0	\$0	\$0
1999	51099288	Repair Ball Valve for Pump	9,308	6,060	\$0	\$0	\$0	\$0	\$0	\$0
2000	51000302	Denison Ave. Bridge - 12" & 30" Water Mains	9,308	6,221	\$18,058	\$4,644	\$13,415	\$27,019	\$6,948	\$20,071
2000	51000310	Morgan Pump Station	9,308	6,221	\$3,019,829	\$1,811,898	\$1,207,932	\$4,518,336	\$2,711,002	\$1,807,335
2001	51001336	Water Main Specials	9,308	6,342	\$116,129	\$28,203	\$87,926	\$170,439	\$41,392	\$129,047
2001	51001341	Repair Hagen Road Hwy Sluice Gate	9,308	6,342	\$10,564	\$5,131	\$5,433	\$15,505	\$7,531	\$7,974
2001	51001343	Repair of Crown Sludge Dome	9,308	6,342	\$7,913	\$3,843	\$4,070	\$11,614	\$5,641	\$5,973
2001	51001345	Engineering/Environmental Consulting	9,308	6,342	\$0	\$0	\$0	\$0	\$0	\$0
2001	51001353	Crown Residuals Press Rehab	9,308	6,342	\$111,389	\$54,103	\$57,286	\$163,483	\$79,406	\$84,077
2001	51001501	Equipment for Distribution Mains	9,308	6,342	\$7,541	\$1,831	\$5,710	\$11,068	\$2,688	\$8,380
2001	51001503	Spectrometer and Accessories	9,308	6,342	\$2,423	\$1,791	\$632	\$3,556	\$2,628	\$928
2001	51001504	Distribution System Instruments	9,308	6,342	\$1,997	\$1,476	\$521	\$2,932	\$2,167	\$765
2001	51001518	Installation & Testing LAN	9,308	6,342	\$21,706	\$21,706	\$0	\$31,857	\$31,857	\$0
2001	51001520	Configuring, Monitoring, Troubleshooting	9,308	6,342	\$10,111	\$5,209	\$4,902	\$14,840	\$7,645	\$7,195
2001	51001522	Require K, Repair/Replacement SCADA	9,308	6,342	\$34,383	\$23,381	\$11,003	\$50,463	\$34,315	\$16,148
2002	51002364	Security Contracts/Professional Services	9,308	6,538	\$891,005	\$432,002	\$459,002	\$1,268,503	\$615,032	\$653,471
2002	51002366	Water Tank Inspection Cycle E	9,308	6,538	\$0	\$0	\$0	\$0	\$0	\$0
2002	51002372	General Engineering Services	9,308	6,538	\$0	\$0	\$0	\$0	\$0	\$0
2002	51002376	Water Repair and Replacement	9,308	6,538	\$124,108	\$44,127	\$79,981	\$176,690	\$62,823	\$113,867
2002	51002380	PEP Program Management Phase II	9,308	6,538	\$841,217	\$407,863	\$433,354	\$1,197,621	\$580,665	\$616,956
2002	51002530	Financial Information Budget Software	9,308	6,538	\$20,739	\$10,055	\$10,684	\$29,525	\$14,315	\$15,210
2002	51002531	Electronic Document Management System	9,308	6,538	\$27,718	\$13,439	\$14,279	\$39,462	\$19,133	\$20,329
2002	51002532	Work Management System	9,308	6,538	\$149,088	\$72,285	\$76,803	\$212,253	\$102,910	\$109,342
2003	51003559	CIS Assessment/Design & Implementation	9,308	6,694	\$956,896	\$434,953	\$521,943	\$1,330,563	\$604,801	\$725,762
2003	51003560	Automatic Hardware & Software	9,308	6,694	\$23,881	\$23,881	\$0	\$33,207	\$33,207	\$0
2003	51003563	Various Engineering Prof. Services	9,308	6,694	\$0	\$0	\$0	\$0	\$0	\$0
2004	51004416	Pump & Motor Impellers - Various Stations	9,308	7,115	\$9,922	\$5,556	\$4,366	\$12,980	\$7,269	\$5,711
2004	51004417	Electrical Power Reliability	9,308	7,115	\$668,289	\$217,582	\$450,706	\$874,270	\$284,646	\$589,624
2004	51004420	General Engineering Services	9,308	7,115	\$0	\$0	\$0	\$0	\$0	\$0
2004	51004427	Harvard Yards Building Improvements	9,308	7,115	\$38,334	\$17,889	\$20,445	\$50,149	\$23,403	\$26,746
2004	51004428	Water Sewer Valve	9,308	7,115	\$2,602	\$2,602	\$0	\$4,044	\$2,674	\$1,370
2004	51004570	Monitoring Capital Projects	9,308	7,115	\$33,627	\$14,266	\$19,361	\$43,992	\$18,663	\$25,329
2004	51004571	Network Back-Up at 205 St. Clair	9,308	7,115	\$26,527	\$26,527	\$0	\$34,703	\$34,703	\$0
2004	51004572	Switchover & Motor Control Repairs	9,308	7,115	\$12,991	\$7,908	\$5,084	\$16,995	\$10,345	\$6,650
2004	51004580	Biological Testing Equipment	9,308	7,115	\$1,514	\$922	\$593	\$1,981	\$1,206	\$775
2004	51004587	Chemical Feeder Process Improvements	9,308	7,115	\$0	\$0	\$0	\$0	\$0	\$0
2005	51005435	Crown Water Main Plant	9,308	7,446	\$11,585	\$4,303	\$7,282	\$14,462	\$5,379	\$9,083
2005	51005440	Morgan Filter Rehab Construction	9,308	7,446	\$1,691,366	\$628,221	\$1,063,144	\$2,114,321	\$785,319	\$1,329,001
2005	51005443	Morgan Pump Station Demolition	9,308	7,446	\$111,407	\$48,276	\$63,131	\$139,266	\$60,349	\$78,917
2005	51005447	Meter Automation AMR - Old - Large Meter Right Sizing	9,308	7,446	\$1,287,662	\$478,275	\$809,388	\$1,609,664	\$597,875	\$1,011,789
2006	51006452	Morgan East Reservoir	9,308	7,749	\$2,523,585	\$1,009,434	\$1,514,151	\$3,031,154	\$1,212,462	\$1,818,693
2006	51006452	Morgan East Reservoir	9,308	7,749	\$0	\$0	\$0	\$0	\$0	\$0
2006	51006459	Renovations 1201 Lakeside	9,308	7,749	\$41,520	\$11,072	\$30,448	\$46,871	\$13,299	\$33,572
2006	51006460	Housekeeping Improvements Ph I & II	9,308	7,749	\$291,791	\$77,811	\$213,980	\$350,479	\$93,461	\$257,018
2006	51006461	General Engineering Services	9,308	7,749	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007465	Raw Water Monitoring System	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007466	Crown Water Plant	9,308	7,971	\$846,725	\$266,113	\$580,611	\$988,808	\$310,768	\$678,040
2007	51007478	Morgan Pretreatment and Residuals	9,308	7,971	\$2,570,522	\$807,878	\$1,762,644	\$3,001,864	\$943,443	\$2,058,421
2007	51007478	Morgan Pretreatment and Residuals	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007481	Trunk Main Renewal Program	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007482	Facilities Improvements	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008483	Replace & rehab cranes @ Water Plants & P.S.	9,308	8,311	\$3,307	\$1,438	\$1,869	\$3,704	\$1,610	\$2,093
2008	51008489	GIS Build-Out @ 205 St. Clair	9,308	8,311	\$6,649	\$6,649	\$0	\$7,446	\$7,446	\$0
2008	51008490	Water Tank Rehabilitation	9,308	8,311	\$192,477	\$38,495	\$153,981	\$215,563	\$43,113	\$172,450
2008	51008490	Water Tank Rehabilitation	9,308	8,311	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008491	Roof Rehabilitation and Replacement at Non-Plant Facilities	9,308	8,311	\$28,109	\$6,246	\$21,862	\$31,480	\$6,996	\$24,484
2008	51008497	General Engineering Services - Phase V	9,308	8,311	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008603	Replacement of Turbidimeters	9,308	8,311	\$835	\$239	\$597	\$936	\$267	\$668
2008	51008605	Payment Remittance Processing	9,308	8,311	\$11,437	\$3,466	\$7,971	\$12,809	\$3,882	\$8,928
2008	51008606	Gas Chromatograph & Appertenances	9,308	8,311	\$1,713	\$1,142	\$571	\$1,918	\$1,279	\$639
2008	51008607	Replacement of Large Submersible Pumps at Various Sites	9,308	8,311	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008608	Replacement of Large Valve Actuators for Independence S	9,308	8,311	\$1,316	\$439	\$877	\$1,473	\$491	\$982
2009	51009102	Property Acquisition @ 4204 Harvard Ave.	9,308	8,570	\$1,878	\$0	\$1,878	\$2,040	\$0	\$2,040
2009	51009106	Morgan Chemical Facility	9,308	8,570	\$1,101,426	\$660,856	\$440,570	\$1,196,256	\$717,754	\$478,502
2009	51009106	Morgan Chemical Facility	9,308	8,570	\$0	\$0	\$0	\$0	\$0	\$0
2009	51009107	Energy Management	9,308	8,570	\$0	\$0	\$0	\$0	\$0	\$0
2009	51009110	Harvard Yards Facility Modifications	9,308	8,570	\$18,317	\$5,495	\$12,822	\$19,894	\$5,968	\$13,926
2010	w10113	Transmission Main Renewal Program	9,308	8,802	\$53,921	\$6,102	\$47,758	\$57,018	\$6,516	\$50,502
2010	w10116	General Engineering Services Ph. VI	9,308	8,802	\$0	\$0	\$0	\$0	\$0	\$0
2010	w10119	Security Upgrades & Improvements	9,308	8,802	\$7,685	\$1,863	\$5,822	\$8,126	\$1,970	\$6,156
2010	w10613	Security/CNL Project	9,308	8,802	\$1,105	\$268	\$837	\$1,168	\$283	\$885
2010	w10616	GIS SAN	9,308	8,802	\$4,578	\$4,578	\$0	\$4,841	\$4,841	\$0
2011	w11125	Morgan Raw Water Pump Station Improvements	9,308	9,070	\$348,704	\$81,364	\$267,340	\$357,862	\$83,501	\$274,361
2011	w11125	Morgan Raw Water Pump Station Improvements	9,308	9,070	\$0	\$0	\$0	\$0	\$0	\$0
2011	w11132	1825 Lakeside Avenue Improvements	9,308	9,070	\$3,707	\$577	\$3,131	\$3,805	\$592	\$3,213
2011	w11619	Purchase of Laboratory Equipment	9,308	9,070	\$0	\$0	\$0	\$0	\$0	\$0
2012	w12139	General Engineering Services VII	9,308	9,308	\$0	\$0	\$0	\$0	\$0	\$0
2012	w12141	Control Systems Rehab	9,308	9,308	\$3,458	\$830	\$2,628	\$3,458	\$830	\$2,628
2012	w12146	800 Mhz Radio	9,308	9,308	\$77,897	\$20,321	\$57,576	\$77,897	\$20,321	\$57,576
2012	w12147	800 Mhz Radio "A"	9,308	9,308	\$89,998	\$23,478	\$66,520	\$89,998	\$23,478	\$66,520
2012	w12620	Distribution and Maintenance Equipment	9,308	9,308	\$632	\$165	\$467	\$632	\$165	\$467
2012	w12621	Computer Hardware 2012	9,308	9,308	\$12,541	\$12,541	\$0	\$12,541	\$12,541	\$0
2012	w12622	Vehicles 2012	9,308	9,308	\$0	\$0	\$0	\$0	\$0	\$0
2012	w12624	Utility Vehicles (Gators)	9,308	9,308	\$0	\$0	\$0	\$0	\$0	\$0
2013	w13155	Secondary Station Improvements Cycle F	9,308	9,308	\$122,457	\$20,409	\$102,047	\$122,457	\$20,409	\$102,047
2013	w13627	Portable Potable Water Dispensing Trailer	9,308	9,308	\$1,218	\$609	\$609	\$1,218	\$609	\$609
2013	w13628	Computer Hardware & Software 2013	9,308	9,308	\$5,087	\$5,087	\$0	\$5,087	\$5,087	\$0

Appendix B

Table 3
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Network Inch-Miles-Based Valuation

Cost: 1 = Current Approp.; 2 = Expend to Date

Year	Project Number	Description	Asset Type	Funding Source	Depreciation	Accumulated Depreciation	Original Cost	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Original Cost to Westlake	Age	Annual Depreciation to Westlake	Assigned Asset Life
1981		Meters	M		\$11,932		\$3,177,621	\$3,177,621	5	Entire System	3.35%	\$1,311,158	37	\$3,747	35
1982		Trunk Main Ridge Rd.	TM		\$10,767		\$753,685	\$753,685	2	Western Suburbs	8.40%	\$63,311	36	\$904	70
1982		Increase First High Service	DO		\$2,471		\$173,000	\$173,000	5	Entire System	3.35%	\$5,792	36	\$83	70
1982		Study for discharge piping	DO		\$47		\$3,258	\$3,258	6	Undetermined/Unqualified	0.00%	\$0	36	\$0	70
1983		Expand Crown Filter	TPG		\$650		\$22,736	\$22,736	2	Western Suburbs	8.40%	\$1,910	35	\$55	35
1983		Division Filter Study - Shu	TPG		\$2,535		\$88,711	\$88,711	10	Western City and Suburbs	5.23%	\$4,638	35	\$133	35
1983		Rehab Sub Electric Facilities	PSES		\$1		\$60	\$60	6	Undetermined/Unqualified	0.00%	\$0	35	\$0	43
1984		Cleaning & Relining Program	TPG		\$25,690		\$1,798,297	\$1,798,297	5	Entire System	3.35%	\$60,205	34	\$860	35
1984		Piometer Survey of Distribution	MISC		\$14,900		\$491,693	\$491,693	5	Entire System	3.35%	\$16,461	34	\$499	33
1984		ODOT Force Account 1480	TM		\$8,638		\$604,640	\$604,640	5	Entire System	3.35%	\$20,243	34	\$289	70
1984		Cleaning & Relining Mains by CWD	DM		\$32		\$2,210	\$2,210	6	Undetermined/Unqualified	0.00%	\$0	34	\$0	70
1984		Cleaning & Relining Mains	DM		\$19,491		\$1,364,375	\$1,364,375	5	Entire System	3.35%	\$45,678	34	\$653	70
1984		Preliminary Eng Division set	MISC		\$12		\$400	\$400	6	Undetermined/Unqualified	0.00%	\$0	34	\$0	33
1985		Replace Roofing System at Facility	R/O		\$3,915		\$162,653	\$162,653	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	45
1985		Restore Backwash Water Reservoir	TPG		\$196		\$6,855	\$6,855	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Clean & Relining Water mains	DM		\$29,113		\$2,037,884	\$2,037,884	5	Entire System	3.35%	\$68,226	33	\$975	70
1985		Clean & Relining Water mains	DM		\$521		\$36,483	\$36,483	5	Entire System	3.35%	\$1,221	33	\$17	70
1985		Crown Intake Restoration	SIST		\$18,668		\$1,642,811	\$1,642,811	2	Western Suburbs	8.40%	\$138,000	33	\$1,568	88
1985		Clean & Relining Supply Mains	DM		\$32,465		\$2,272,543	\$2,272,543	5	Entire System	3.35%	\$76,082	33	\$1,087	70
1985		Install Telemetering - Seven Hills	M		\$1		\$46	\$46	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Replace Roof-Radio Repair	BLD		\$889		\$33,990	\$33,990	5	Entire System	3.35%	\$1,339	33	\$30	45
1985		Clean & reline 85K Ft Mains	DM		\$44,512		\$3,115,850	\$3,115,850	5	Entire System	3.35%	\$104,316	33	\$1,490	70
1985		Electrification at Division	TPG		\$2		\$67	\$67	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Electrification at Division	TPG		\$790		\$27,654	\$27,654	10	Western City and Suburbs	5.23%	\$1,446	33	\$41	35
1985		New Filtration Facilities	TPG		\$743		\$25,999	\$25,999	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Consulting	MISC		\$3,726		\$122,953	\$122,953	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	33
1985		Crown Intake Ditching	SIST		\$1,795		\$157,970	\$157,970	2	Western Suburbs	8.40%	\$13,270	33	\$151	88
1985		Clean & Line Mains 1985	DM		\$33,946		\$2,376,236	\$2,376,236	5	Entire System	3.35%	\$79,554	33	\$1,136	70
1986		Division Rehabilitation	TPG		\$2,976,574		\$104,180,086	\$104,180,086	10	Western City and Suburbs	5.23%	\$5,446,871	32	\$155,625	35
1986		Division Rehabilitation/Professional services	MISC		\$327,547		\$10,809,067	\$10,809,067	10	Western City and Suburbs	5.23%	\$655,133	32	\$17,125	33
1986		Crown sludge Rehab	TPG		\$219,500		\$7,682,507	\$7,682,507	2	Western Suburbs	8.40%	\$645,347	32	\$18,438	35
1986		Crown Masonry Rehab	BLD		\$5,524		\$248,558	\$248,558	2	Western Suburbs	8.40%	\$20,879	32	\$464	45
1986		Piometer service	M		\$8,233		\$288,171	\$288,171	5	Entire System	3.35%	\$9,648	32	\$276	35
1986		Kirkland Parking Garage	PKG		\$2,885		\$86,553	\$86,553	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	30
1986		Parma Control SCADA System	ELEC		\$53,613		\$1,340,333	\$1,340,333	5	Entire System	3.35%	\$44,873	32	\$1,795	25
1986		Clean & Relining Mains 1985	DM		\$53		\$3,712	\$3,712	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	70
1986		Water Main, Fulton- Denison	TM		\$731		\$51,202	\$51,202	2	Western Suburbs	8.40%	\$4,301	32	\$61	70
1986		Water Main, Fulton-Brackville	TM		\$688		\$48,150	\$48,150	2	Western Suburbs	8.40%	\$4,045	32	\$58	70
1986		Engineering Study	MISC		\$94		\$3,118	\$3,118	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	32
1986		Crown Intake Restoration	SIST		\$258		\$22,739	\$22,739	2	Western Suburbs	8.40%	\$1,910	32	\$22	88
1986		Crown, Restone WW System	TPG		\$3,844		\$134,525	\$134,525	2	Western Suburbs	8.40%	\$11,300	32	\$323	35
1986		DPU Building	BLD		\$450		\$20,235	\$20,235	5	Entire System	3.35%	\$677	32	\$15	45
1986		Water Main, Various Culvert	DM		\$1,412		\$98,840	\$98,840	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	70
1986		Crown-Sprague Main Part 2	TM		\$52,200		\$3,653,992	\$3,653,992	2	Western Suburbs	8.40%	\$306,943	32	\$4,385	70
1986		Replace Tap Shoes & DIV	TPG		\$124		\$4,353	\$4,353	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	35
1986		Crown - Sprague Main Part 1	TM		\$24,359		\$1,705,125	\$1,705,125	2	Western Suburbs	8.40%	\$143,234	32	\$2,046	70
1986		DPU Building, Replace Roof	BLD		\$2,748		\$123,664	\$123,664	5	Entire System	3.35%	\$4,140	32	\$92	45
1986		Cleaning & Lining Supply Main	TM		\$84,210		\$5,894,714	\$5,894,714	5	Entire System	3.35%	\$197,349	32	\$2,819	70
1986		Restore Reservoir Tank-Engle	PSDS		\$4,645		\$232,250	\$232,250	2	Western Suburbs	8.40%	\$19,510	32	\$390	50
1986		Painting Reservoir Tank-Engle	PSPT		\$2,323		\$69,680	\$69,680	2	Western Suburbs	8.40%	\$5,853	32	\$195	30
1986		Replace Tap Sleeve- Division	TPG		\$7,915		\$277,015	\$277,015	10	Western City and Suburbs	5.23%	\$14,483	32	\$414	35
1986		Harvard Yard Property Expansion	NA		\$0		\$338,500	\$338,500	5	Entire System	3.35%	\$11,333	32	\$0	NA
1987		Aerial Photo and Surveys	MISC		\$912		\$30,086	\$30,086	5	Entire System	3.35%	\$1,007	31	\$31	33
1987		Replace Crown Flocculators	TPG		\$12,934		\$452,688	\$452,688	2	Western Suburbs	8.40%	\$38,027	31	\$1,086	35
1987		Crown-Sprague Main Part 3	TM		\$26,321		\$1,842,489	\$1,842,489	2	Western Suburbs	8.40%	\$154,773	31	\$2,211	70
1987		Replace Crown Boilers	TPG		\$8,519		\$298,178	\$298,178	2	Western Suburbs	8.40%	\$25,048	31	\$716	35
1987		Crown-Sprague Main Sec 1 4A	TM		\$24,526		\$1,716,853	\$1,716,853	2	Western Suburbs	8.40%	\$144,219	31	\$2,060	70
1987		Crown-Sprague Main Sec 1 4B	TM		\$32,344		\$2,264,082	\$2,264,082	2	Western Suburbs	8.40%	\$190,188	31	\$2,717	70
1987		Fulton -Brackville Supply main Sec1	TM		\$42,961		\$3,007,297	\$3,007,297	2	Western Suburbs	8.40%	\$252,619	31	\$3,609	70
1987		Fulton -Brackville Supply main Sec1	TM		\$42,783		\$2,994,824	\$2,994,824	2	Western Suburbs	8.40%	\$251,572	31	\$3,594	70
1987		Brookpark-Deering Supply Main	TM		\$76,877		\$5,381,391	\$5,381,391	2	Western Suburbs	8.40%	\$452,048	31	\$6,458	70
1987		Crown Low Service Supply Main	TM		\$4,957		\$346,964	\$346,964	2	Western Suburbs	8.40%	\$29,146	31	\$416	70
1987		Fulton-Denison-Bigkap Supply Main	TM		\$68,835		\$4,818,473	\$4,818,473	2	Western Suburbs	8.40%	\$404,762	31	\$5,782	70
1987		1989 Cleaning & Lining	DM		\$77,606		\$5,432,430	\$5,432,430	5	Entire System	3.35%	\$181,872	31	\$2,598	70
1987		Division-Farmington Boiler Replacement	TPG		\$21,854		\$764,904	\$764,904	5	Entire System	3.35%	\$25,608	31	\$732	35
1987		Aerial Photo Mapping Survey	MISC		\$9,802		\$323,474	\$323,474	5	Entire System	3.35%	\$10,830	31	\$328	33
1988	5108806	Harvard Yards - Professional Services	MISC		\$58,438		\$1,928,444	\$1,928,444	5	Entire System	3.35%	\$64,562	30	\$1,956	33
1988		Crown Plant Neutralization System	TPG		\$2,916		\$102,073	\$102,073	2	Western Suburbs	8.40%	\$8,574	30	\$245	35
1988		Division Dam Board Installation	SO		\$3,804		\$108,112	\$108,112	10	Western City and Suburbs	5.23%	\$5,652	30	\$188	30
1988		Rehabilitation Harvard Yards Prof. Serv	MISC		\$6,830		\$1,875,405	\$1,875,405	6	Undetermined/Unqualified	0.00%	\$0	30	\$0	33
1988		Pump Station Battery Installation	PSES		\$1,001		\$43,022	\$43,022	6	Undetermined/Unqualified	0.00%	\$0	30	\$0	43
1988		Water Bldg at Crown Plant	BLD		\$698		\$31,393	\$31,393	2	Western Suburbs	8.40%	\$2,637	30	\$59	45
1988		1989 Cleaning & Relining Program	DM		\$138,537		\$9,697,620	\$9,697,620	5	Entire System	3.35%	\$324,667	30	\$4,638	70
1988		Install Cathod Protect Sys	PSES		\$5,700		\$245,110	\$245,110	5	Entire System	3.35%	\$8,206	30	\$191	43
1989	5108900	Refine Liquid Alum Tanks	TPCS		\$13,266		\$198,990	\$198,990	6	Undetermined/Unqualified	0.00%	\$0	29	\$0	15
1989	5108902	Remove/Replace PADS Capacitor	PSES		\$6,701		\$288,163	\$288,163	5	Entire System	3.35%	\$9,648	29	\$0	43
1989	5108903	Parma Control Ctr Renovation	PSES		\$172,848		\$7,432,481	\$7,432,481	5	Entire System	3.35%	\$248,832	29	\$5,787	43
1989	5108904	Harvard Yards - Construction	PSG		\$1,041,485	\$0	\$1,244,542	\$1,244,542	5	Entire System	3.35%	\$1,046,036	29	\$34,868	30
1989	5108906	Repair Twin Conduit at Division	PSES		\$14,848		\$638,443	\$638,443	10	Western City and Suburbs	5.23%	\$33,380	29	\$776	43
1990	5109020	1990 Cleaning & Relining Program	DM		\$116,663		\$8,166,415	\$8,166,415	5	Entire System	3.35%	\$273,403	28	\$3,906	70
1990	5109024	Division - Northfield Road Imp.	BLD		\$852		\$38,321	\$38,321	6	Undetermined/Unqualified	0.00%	\$0	28	\$0	45
1990	5109026	Main Station Site Improvements	PSG		\$119,847		\$3,580,412	\$3,580,412	5	Entire System	3.35%	\$119,869	28	\$3,996	30
1990	5109028	Aerial Photo / Mapping Project	TPG		\$627		\$20,685	\$20,685	5	Entire System	3.35%	\$693	28	\$21	33
1990	5109030	Clean & Reline Trunk Mains 9	TM		\$81,079		\$5,675,529	\$5,675,529	5	Entire System	3.35%	\$190,011	28	\$2,714	70
1990	5109031	Division Surge Tank Insulation	TPG		\$2,398		\$83,930	\$83,930	10	Western City and Suburbs	5.23%	\$4,388	28	\$125	35
1990	5109032	Chlorine Detection Systems	TPCS		\$4,691		\$70,371	\$70,371	5	Entire System	3.35%	\$2,356	28	\$157	15
1990	5109037	Paint Dovers & Brackville Towers	PSPT		\$20,723		\$621,700	\$621,700	2	Western Suburbs	8.40%	\$52,224	28	\$1,741	30
1991	51091942	Relining Trunk Mains 91/92	TM		\$33,281		\$2,329,700	\$2,329,700	5	Entire System	3.35%	\$77,996	27	\$1,114	70
1991	51091945	Radical Various Water Tanks	BLD		\$40,919		\$2,864,343	\$2,864,343	6	Undetermined/Unqualified	0.00%	\$0	27	\$0</	

Appendix B

Table 3
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Network Inch-Miles-Based Valuation

Year	Project Number	Description	Cost Indices		Original Cost	Accum. Depreciation	Original Cost Less Depreciation	RCNLD Valuation		
			Current Date Value	Purchase Date Value				Replacement Cost New	Indexed Accum. Deprec.	Replacement Cost New Less Depreciation
1981		Meters	9,308	3,835	\$131,158	\$131,158	\$0	\$345,351.88	\$345,352	\$0
1982		Trunk Main Ridge Rd.	9,308	3,825	\$63,311	\$32,560	\$30,751	\$154,065.44	\$79,234	\$74,832
1982		Increase First High Service	9,308	3,825	\$5,792	\$2,979	\$2,813	\$14,094.30	\$7,248	\$6,846
1982		Study for discharge piping	9,308	3,825	\$0	\$0	\$0	\$0	\$0	\$0
1983		Expand Crown Filter	9,308	4,056	\$1,910	\$1,910	\$0	\$4,383	\$4,383	\$0
1983		Division Filter Study - Shru	9,308	4,056	\$4,638	\$4,638	\$0	\$10,644	\$10,644	\$0
1983		Rehab Sub Electric Facilities	9,308	4,056	\$0	\$0	\$0	\$0	\$0	\$0
1984		Cleaning & Relining Program	9,308	4,146	\$60,205	\$29,243	\$30,963	\$135,164	\$65,651	\$69,513
1984		Potometer Survey of Distribution	9,308	4,146	\$16,461	\$16,461	\$0	\$36,957	\$36,957	\$0
1984		ODOT Force Account 1480	9,308	4,146	\$20,243	\$9,832	\$10,411	\$45,446	\$22,074	\$23,372
1984		Cleaning & Relining Mains by CWD	9,308	4,146	\$0	\$0	\$0	\$0	\$0	\$0
1984		Cleaning & Relining Mains	9,308	4,146	\$45,678	\$22,186	\$23,491	\$102,549	\$49,810	\$52,740
1984		Preliminary Eng Division set	9,308	4,146	\$0	\$0	\$0	\$0	\$0	\$0
1985		Replace Roofing System at Facility	9,308	4,195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Restore Backwash Water Reservoir	9,308	4,195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Clean & Relining Water mains	9,308	4,195	\$68,226	\$32,164	\$36,062	\$151,383	\$71,366	\$80,017
1985		Clean & Relining Water mains	9,308	4,195	\$1,221	\$576	\$646	\$2,710	\$1,278	\$1,432
1985		Crown Intake Restoration	9,308	4,195	\$138,000	\$51,750	\$86,250	\$306,198	\$114,824	\$191,374
1985		Clean & Relining Supply Mains	9,308	4,195	\$76,062	\$35,867	\$40,215	\$168,814	\$79,584	\$89,230
1985		Install Telemetering - Seven Hills	9,308	4,195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Replace Roof-Radio Repair	9,308	4,195	\$1,339	\$982	\$357	\$2,971	\$2,178	\$792
1985		Clean & relne 85K Ft Mains	9,308	4,195	\$104,316	\$49,177	\$55,138	\$231,459	\$109,116	\$122,342
1985		Electrification at Division	9,308	4,195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Electrification at Division	9,308	4,195	\$1,446	\$1,363	\$83	\$3,208	\$3,025	\$183
1985		New Filtration Facilities	9,308	4,195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Consulting	9,308	4,195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Crown Intake Diving	9,308	4,195	\$13,270	\$4,976	\$8,294	\$29,444	\$11,041	\$18,402
1985		Clean & Line Mains 1985	9,308	4,195	\$79,554	\$37,504	\$42,050	\$176,517	\$83,215	\$93,302
1986		Division Rehabilitation	9,308	4,295	\$5,446,871	\$4,979,996	\$466,875	\$11,804,302	\$10,792,504	\$1,011,797
1986		Division Rehabilitation/Professional services	9,308	4,295	\$565,133	\$548,008	\$17,125	\$1,224,740	\$1,187,626	\$37,113
1986		Crown sludge Rehab	9,308	4,295	\$645,347	\$590,032	\$55,315	\$1,398,578	\$1,278,700	\$119,878
1986		Crown Masonry Rehab	9,308	4,295	\$20,879	\$14,848	\$6,032	\$45,249	\$32,177	\$13,072
1986		Potometer service	9,308	4,295	\$9,648	\$8,821	\$827	\$20,908	\$19,116	\$1,792
1986		Kirtland Parking Garage	9,308	4,295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Parma Control SCADA System	9,308	4,295	\$44,873	\$44,873	\$0	\$97,247	\$97,247	\$0
1986		Clean & Relining Mains 1985	9,308	4,295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Water Main, Fulton- Denison	9,308	4,295	\$4,301	\$1,966	\$2,335	\$9,321	\$4,261	\$5,060
1986		Water Main, Fulton-Brackville	9,308	4,295	\$4,045	\$1,849	\$2,196	\$8,766	\$4,007	\$4,758
1986		Engineering Study	9,308	4,295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Crown Intake Restoration	9,308	4,295	\$1,910	\$695	\$1,216	\$4,140	\$1,505	\$2,634
1986		Crown, Restore WW System	9,308	4,295	\$11,300	\$10,332	\$969	\$24,490	\$22,391	\$2,099
1986		DPU Building	9,308	4,295	\$677	\$482	\$196	\$1,468	\$1,044	\$424
1986		Water Main, Various Culvert	9,308	4,295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Crown-Sprague Main Part 2	9,308	4,295	\$306,943	\$140,317	\$166,626	\$665,198	\$304,091	\$361,108
1986		Replace Tap Steers & DIV	9,308	4,295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Crown - Sprague Main Part 1	9,308	4,295	\$143,234	\$65,478	\$77,756	\$310,413	\$141,903	\$168,510
1986		DPU Building, Replace Roof	9,308	4,295	\$4,140	\$2,944	\$1,196	\$8,972	\$6,380	\$2,592
1986		Cleaning & Lining Supply Main	9,308	4,295	\$197,349	\$90,217	\$107,132	\$427,689	\$195,515	\$232,174
1986		Restore Reservoir Tank-Engle	9,308	4,295	\$19,510	\$12,486	\$7,023	\$42,280	\$27,059	\$15,221
1986		Painting Reservoir Tank-Engle	9,308	4,295	\$5,853	\$5,853	\$0	\$12,685	\$12,685	\$0
1986		Replaced Tap Steers-Division	9,308	4,295	\$14,483	\$13,242	\$1,241	\$31,388	\$28,697	\$2,690
1986		Harvard Yard Property Expansion	9,308	4,295	\$11,333	\$0	\$11,333	\$24,560	\$0	\$24,560
1987		Aerial Photo and Surveys	9,308	4,406	\$1,007	\$946	\$61	\$2,128	\$1,999	\$129
1987		Replace Crown Flocculators	9,308	4,406	\$38,027	\$33,681	\$4,346	\$80,334	\$71,153	\$9,181
1987		Crown-Sprague Main Part 3	9,308	4,406	\$154,773	\$68,542	\$86,231	\$326,969	\$144,801	\$182,169
1987		Replace Crown Boilers	9,308	4,406	\$25,048	\$22,185	\$2,863	\$52,915	\$46,867	\$6,047
1987		Crown-Sprague Main Sec 1 - 4A	9,308	4,406	\$144,273	\$63,869	\$80,351	\$304,674	\$134,927	\$169,747
1987		Crown-Sprague Main Sec 1 - 4B	9,308	4,406	\$190,188	\$84,226	\$105,962	\$401,786	\$177,934	\$223,852
1987		Fulton -Brackville Supply main Sec1	9,308	4,406	\$252,819	\$111,874	\$140,945	\$533,677	\$236,343	\$297,334
1987		Fulton -Brackville Supply main Sec1	9,308	4,406	\$251,572	\$111,410	\$140,161	\$531,464	\$235,363	\$296,101
1987		Brookpark-Deering Supply Main	9,308	4,406	\$452,048	\$200,193	\$251,856	\$954,986	\$422,922	\$532,063
1987		Crown Low Service Supply Main	9,308	4,406	\$29,146	\$12,907	\$16,238	\$61,572	\$27,268	\$34,305
1987		Fulton-Denison-Bigark Supply Main	9,308	4,406	\$404,762	\$179,252	\$225,510	\$855,090	\$378,683	\$476,407
1987		1989 Cleaning & Lining	9,308	4,406	\$80,543	\$80,543	\$0	\$384,219	\$170,154	\$214,065
1987		Division-Farmount Boiler Replacement	9,308	4,406	\$25,608	\$22,682	\$2,927	\$54,099	\$47,916	\$6,183
1987		Aerial Photo Mapping Survey	9,308	4,406	\$10,830	\$10,173	\$656	\$22,878	\$21,492	\$1,387
1988	51088806	Harvard Yards - Professional Services	9,308	4,519	\$64,562	\$58,693	\$5,869	\$132,982	\$120,893	\$12,089
1988		Crown Plant Neutralization System	9,308	4,519	\$8,574	\$7,349	\$1,225	\$17,661	\$15,138	\$2,523
1988		Division Dam Board Installation	9,308	4,519	\$5,652	\$5,652	\$0	\$11,643	\$11,643	\$0
1988		Rehabilitation Harvard Yards Profit. Serv	9,308	4,519	\$0	\$0	\$0	\$0	\$0	\$0
1988		Pump Station Battery Installations	9,308	4,519	\$0	\$0	\$0	\$0	\$0	\$0
1988		Water Bldg at Crown Plant	9,308	4,519	\$2,637	\$1,758	\$879	\$5,432	\$3,621	\$1,811
1988		1989 Cleaning & Relining Program	9,308	4,519	\$324,667	\$139,143	\$185,524	\$668,731	\$286,599	\$382,132
1988		Install Cathod Protect Sys	9,308	4,519	\$8,206	\$5,725	\$2,481	\$16,902	\$11,792	\$5,110
1989	51089900	Reline Liquid Alum Tanks	9,308	4,815	\$0	\$0	\$0	\$0	\$0	\$0
1989	51089902	Remove/Replace PCB Capacitor	9,308	4,815	\$0	\$0	\$0	\$0	\$0	\$0
1989	51089903	Parma Control Ctr Renovation	9,308	4,815	\$248,832	\$167,817	\$81,015	\$481,024	\$324,411	\$156,612
1989	51089904	Harvard Yards - Construction	9,308	4,815	\$1,046,036	\$1,011,168	\$34,868	\$2,022,119	\$1,954,715	\$67,404
1989	51089906	Repair Twin Conduit at Division	9,308	4,815	\$33,380	\$22,512	\$10,868	\$64,527	\$43,519	\$21,009
1990	51090020	1990 Cleaning & Relining Program	9,308	4,732	\$273,403	\$109,361	\$164,042	\$537,793	\$215,117	\$322,676
1990	51090024	Division - Northfield Road Imp.	9,308	4,732	\$0	\$0	\$0	\$0	\$0	\$0
1990	51090026	Main Station Site Improvements	9,308	4,732	\$119,869	\$111,877	\$7,991	\$235,786	\$220,066	\$15,719
1990	51090028	Aerial Photo / Mapping Project	9,308	4,732	\$693	\$588	\$105	\$1,362	\$1,156	\$206
1990	51090030	Clean & Reline Trunk Mains 9	9,308	4,732	\$190,011	\$76,004	\$114,007	\$373,758	\$149,503	\$224,255
1990	51090031	Division Surge Tank Insulation	9,308	4,732	\$4,388	\$3,511	\$878	\$6,832	\$6,905	\$1,726
1990	51090032	Chlorine Detection Systems	9,308	4,732	\$2,356	\$2,356	\$0	\$4,634	\$4,634	\$0
1990	51090037	Paint Dover & Brecksville Towers	9,308	4,732	\$52,224	\$48,743	\$3,482	\$102,727	\$95,878	\$6,848
1991	51091942	Relining Trunk Mains 91/92	9,308	4,835	\$77,996	\$30,084	\$47,912	\$150,152	\$57,916	\$92,236
1991	51091945	Rebuild Vaux Water Mains	9,308	4,835	\$0	\$0	\$0	\$0	\$0	\$0
1991	51091946	Crown Plant Roof Replacement	9,308	4,835	\$16,594	\$9,956	\$6,638	\$31,945	\$19,167	\$12,778
1991	51091950	Telecommunications Systems	9,308	4,835	\$24,712	\$24,712	\$0	\$47,574	\$47,574	\$0
2005		Telecommunication System	9,308	7,446	\$0	\$0	\$0	\$0	\$0	\$0
1996		Telecommunication System	9,308	5,620	\$0	\$0	\$0	\$0	\$0	\$0
1991	51091952	Crown Plant Drainage & Rehab	9,308	4,835	\$49,240	\$37,985	\$11,255	\$94,793	\$73,126	\$21,667
1991	51091953	Rehab Trunk Water Screens 4	9,308	4,835	\$0	\$0	\$0	\$0	\$0	\$0
1991	51091955	Crown Plant Expansion Profit Sys	9,308	4,835	\$1,569,769	\$1,284,356	\$285,413	\$3,022,008	\$2,472,552	\$549,456
1992	51092960	800 Mhz Radio System-Professional Services	9,308	4,985	\$0	\$0	\$0	\$0	\$0	\$0
1992	51092965	Morgan Pump Bldg. Renovation	9,308	4,985	\$103,929	\$60,048	\$43,881	\$194,056	\$112,121	\$81,935
1992	51092966	Clean & Line Trunk Mains 92	9,308	4,985	\$71,797	\$26,668	\$45,130	\$134,060	\$49,794	\$84,266
1992	51092968	800 Mhz Radio System-Construction	9,308	4,985	\$0	\$0	\$0	\$0	\$0	\$0
1992	51092973	Removal of 201 & 825 Lakewood Ave	9,308	4,985	\$652,680	\$377,104	\$275,576	\$1,216,986	\$704,130	\$514,556
1992	51092975	G. Morgan Pump Tank - Painting	9,308	4,985	\$7,795	\$6,756	\$1,039	\$14,556	\$12,615	\$1,941
1992	51092978	Clean & Line Trunk Mains 199	9,308	4,985	\$169,980	\$63,135	\$106,845	\$317,387	\$117,887	\$199,500
1992	51092980	Site Improvements Secondary Stations	9,308	4,985	\$21,635	\$18,751	\$2,885	\$40,397	\$35,011	\$5,386
1993	51093200	GIS - Professional Services	9,308	5,210	\$25,899	\$19,620	\$6,278	\$46,269	\$35,053	\$11,217
1993	51093201	Computer System Integrator Sys	9,308	5,210	\$102,769	\$102,769	\$0	\$183,604	\$183,604	\$0
1993	51093982	Clean & Line Trunk Mains 93	9,308	5,210	\$128,607	\$45,331	\$83,276	\$229,765	\$92,059	\$147,706
1993	51093983	Electronic Alarms for Stations	9,308	5,210	\$12,838	\$7,464	\$5,374	\$22,936	\$13,335	\$9,601
1993	51093985	Crown Expansion - Construction	9,308	5,210	\$9,408,610	\$6				

Appendix B

Table 3
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Network Inch-Miles-Based Valuation

Cost: 1 = Current Approp.; 2 = Expend to Date

2

Year	Project Number	Description	Asset Type	Funding Source	Depreciation	Accumulated Depreciation	Original Cost	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Original Cost to Westlake	Age	Annual Depreciation to Westlake	Assigned Asset Life
1996	51096230	Harvard Avenue Bridge Water Main	TM		\$2,374		\$166,152	\$166,152	5	Entire System	3.35%	\$5,563	22	\$75	70
1996	51096232	Water Tank Inspection Program	PSG		\$4,672		\$140,148	\$140,148	5	Entire System	3.35%	\$4,692	22	\$156	30
1996	51096233	Parma Reservoir Rehab	SR		\$121,873		\$8,287,388	\$8,287,388	2	Western Suburbs	8.40%	\$696,158	22	\$10,238	68
1996	51096238	1996/1997 Trunk Main Cleaning & Lining	TM		\$40,739		\$2,851,756	\$2,851,756	5	Entire System	3.35%	\$95,474	22	\$1,364	70
1996	51096242	Demolish Various Non-Operative Stations	PSG		\$37,489		\$1,124,674	\$1,124,674	6	Undetermined/Unqualified	0.00%	\$0	22	\$0	30
1996	51096247	City-Wide GIS	CHS		\$7,101,977		\$35,509,886	\$35,509,886	5	Entire System	3.35%	\$1,188,835	22	\$237,767	5
1997	51097254	Hand Held Meter Reading System	M		\$53,220		\$1,862,704	\$1,862,704	5	Entire System	3.35%	\$62,361	21	\$1,762	35
1997	51097255	Distribution System Hydraulic Model	DO		\$71,019		\$4,971,352	\$4,971,352	5	Entire System	3.35%	\$166,436	21	\$2,376	70
1997	51097264	PEP Phase I - Design	TPG		\$2,074,414		\$72,604,503	\$70,898,446	5	Entire System	3.35%	\$2,373,609	21	\$69,449	35
1998	51098276	Cost of Issuance - Series I Bonds	BLD		\$17,527		\$788,721	\$788,721	5	Entire System	3.35%	\$26,406	20	\$587	45
1998	51098277	Tower Painting and Maintenance	PSPT		\$417,460		\$12,523,813	\$12,523,813	5	Entire System	3.35%	\$419,285	20	\$13,976	30
1998	51098278	Trunk Main Cleaning & Lining - Area 98-12	TM		\$22,189		\$1,553,255	\$1,553,255	5	Entire System	3.35%	\$62,001	20	\$743	70
1999	51099281	Brookpark Water Main Relocation	TM		\$3,633		\$254,333	\$254,333	2	Western Suburbs	8.40%	\$21,364	19	\$305	70
1999	51099282	Chlorine Gas Vessel Handling	TPG		\$19,748		\$296,175	\$296,175	5	Entire System	3.35%	\$9,916	19	\$661	15
1999	51099287	Replace Water Pump Impellers	PSMS		\$1,600		\$40,000	\$42,000	6	Undetermined/Unqualified	0.00%	\$0	19	\$0	25
1999	51099288	Repair Ball Valve for Pump	PSMS		\$1,400		\$35,000	\$36,750	6	Undetermined/Unqualified	0.00%	\$0	19	\$0	25
2000	51000302	Denison Ave. Bridge - 12" & 30" Water Mains	TM		\$4,000		\$280,000	\$280,000	10	Western City and Suburbs	5.23%	\$14,639	18	\$209	70
2000	51000310	Morgan Pump Station	PSG		\$1,560,790		\$46,823,702	\$46,823,702	10	Western City and Suburbs	5.23%	\$2,448,094	18	\$81,603	30
2001	51001336	Water Main Specials	DM		\$60,056		\$4,203,931	\$4,203,931	5	Entire System	3.35%	\$140,743	17	\$2,011	70
2001	51001341	Repair Hagen Repair Box Sluice Gate	TPG		\$4,680		\$163,803	\$163,803	10	Western City and Suburbs	5.23%	\$8,564	17	\$245	35
2001	51001343	Repair of Crown Sludge Dome	TPG		\$2,614		\$91,500	\$91,500	2	Western Suburbs	8.40%	\$7,686	17	\$220	35
2001	51001345	Engineering/Environmental Consulting	MISC		\$4,979		\$164,311	\$164,311	6	Undetermined/Unqualified	0.00%	\$0	17	\$0	33
2001	51001353	Crown Residuals Press Rehab	TPG		\$36,801		\$1,288,020	\$1,288,020	2	Western Suburbs	8.40%	\$108,196	17	\$3,091	35
2001	51001501	Equipment for Distribution Mains	DO		\$3,900		\$273,000	\$273,000	5	Entire System	3.35%	\$9,140	17	\$131	70
2001	51001503	Spectrometer and Accessories	POE		\$3,813		\$87,709	\$87,709	5	Entire System	3.35%	\$2,936	17	\$128	23
2001	51001504	Distribution System Instruments	POE		\$3,144		\$72,309	\$72,309	5	Entire System	3.35%	\$2,421	17	\$105	23
2001	51001518	Installation & Testing LAN	CHS		\$157,151		\$785,756	\$785,756	5	Entire System	3.35%	\$26,306	17	\$5,261	5
2001	51001520	Configuring, Monitoring, Troubleshooting	MISC		\$11,092		\$366,029	\$366,029	5	Entire System	3.35%	\$12,254	17	\$271	33
2001	51001522	Require K, Repair/Replacement SCADA	ELEC		\$49,788		\$1,244,691	\$1,244,691	5	Entire System	3.35%	\$4,617	17	\$1,967	25
2002	51002364	Security Contracts Professional Services	MISC		\$983,529		\$32,456,453	\$32,254,897	5	Entire System	3.35%	\$1,079,862	16	\$32,928	16
2002	51002366	Water Tank Inspection Cycle E	PSPT		\$2,903		\$87,091	\$238,400	6	Undetermined/Unqualified	0.00%	\$0	16	\$0	30
2002	51002372	General Engineering Services	MISC		\$58,093		\$1,917,074	\$1,950,000	6	Undetermined/Unqualified	0.00%	\$0	16	\$0	33
2002	51002376	Roof Repair and Replacement	POE		\$107,889		\$4,855,000	\$4,492,797	5	Entire System	3.35%	\$150,414	16	\$3,612	45
2002	51002380	PEP Program Management Phase II	MISC		\$922,805		\$30,452,555	\$30,452,542	5	Entire System	3.35%	\$1,019,521	16	\$30,895	33
2002	51002530	Financial Information Budget Software	MISC		\$22,750		\$750,749	\$750,749	5	Entire System	3.35%	\$25,134	16	\$762	33
2002	51002531	Electronic Document Management System	MISC		\$31,407		\$1,036,415	\$1,003,415	5	Entire System	3.35%	\$33,593	16	\$1,051	33
2002	51002532	Work Management System	MISC		\$163,547		\$5,397,062	\$5,397,062	5	Entire System	3.35%	\$180,688	16	\$5,475	33
2003	51003559	CIS Assessment/Design & Implementation	MISC		\$1,100,029		\$36,300,965	\$34,640,205	5	Entire System	3.35%	\$1,159,719	15	\$36,828	33
2003	51003560	Automatic Hardware & Software	POE		\$172,902		\$864,510	\$864,510	5	Entire System	3.35%	\$28,943	15	\$5,789	5
2003	51003563	Various Engineering Prof. Services	MISC		\$23,693		\$781,857	\$781,857	6	Undetermined/Unqualified	0.00%	\$0	15	\$0	33
2004	51004416	Pump & Motor Impellers - Various Stations	PSMS		\$14,367		\$359,179	\$359,179	5	Entire System	3.35%	\$12,025	14	\$481	25
2004	51004417	Electrical Power Reliability	PSES		\$562,615		\$24,192,454	\$24,192,454	5	Entire System	3.35%	\$809,939	14	\$18,836	43
2004	51004420	General Engineering Services	MISC		\$112,254		\$3,704,381	\$3,704,381	6	Undetermined/Unqualified	0.00%	\$0	14	\$0	33
2004	51004427	Harvard Yards Building Improvements	PSG		\$46,257		\$1,387,713	\$1,387,713	5	Entire System	3.35%	\$46,459	14	\$1,549	30
2004	51004428	Water Tank Valves	POE		\$6,728		\$168,196	\$168,196	5	Entire System	3.35%	\$5,331	14	\$225	25
2004	51004520	Monitoring Capital Projects	MISC		\$39,688		\$1,309,710	\$1,217,335	5	Entire System	3.35%	\$40,755	14	\$1,329	33
2004	51004571	Network Back-Up at 205 St. Clair	CHS		\$192,060		\$960,300	\$960,300	5	Entire System	3.35%	\$32,150	14	\$6,430	5
2004	51004572	Switchgear & Motor Control Repairs	POE		\$20,447		\$470,289	\$470,289	5	Entire System	3.35%	\$15,745	14	\$685	23
2004	51004580	Biological Testing Equipment	POE		\$2,383		\$54,820	\$54,820	5	Entire System	3.35%	\$1,835	14	\$80	23
2004	51004587	Chemical Feeder Process Improvements	TPCS		\$9,302		\$139,537	\$139,537	6	Undetermined/Unqualified	0.00%	\$0	14	\$0	15
2005	51005435	Crown Water Works Plant	DO		\$3,828		\$133,964	\$133,964	2	Western Suburbs	8.40%	\$11,253	13	\$322	35
2005	51005440	Morgan Filter Rehab Construction	TPG		\$749,295		\$26,225,323	\$26,225,323	10	Western City and Suburbs	5.23%	\$1,371,145	13	\$39,176	35
2005	51005443	Morgan Pump Station Demolition	MISC		\$57,580		\$1,727,411	\$1,727,411	10	Western City and Suburbs	5.23%	\$90,315	13	\$3,010	30
2005	51005444	Meter Automation AMR - Old - Large Meter Right Sizing	PS		\$2,686,130		\$94,014,547	\$46,614,132	5	Entire System	3.35%	\$1,560,594	13	\$89,929	35
2006	51006452	Morgan East Reservoir	SO	5229	\$1,304,307		\$39,129,223	\$39,129,223	10	Western City and Suburbs	5.23%	\$2,045,802	12	\$68,193	30
2006	51006452	Morgan East Reservoir	SO	52410	\$0		\$0	\$0	10	Western City and Suburbs	5.23%	\$0	12	\$0	30
2006	51006459	Renovations 1201 Lakeside	BLD	52001	\$45,556		\$2,050,000	\$1,503,054	5	Entire System	3.35%	\$50,321	12	\$1,525	45
2006	51006460	Various Improvements Ph I & II	BLD	52235	\$239,459		\$10,775,663	\$10,563,011	5	Entire System	3.35%	\$353,639	12	\$8,017	45
2006	51006461	General Engineering Services	MISC	52001	\$87,537		\$2,888,735	\$2,888,735	6	Undetermined/Unqualified	0.00%	\$0	12	\$0	33
2007	51007465	Raw Water Monitoring System	SO	52001	\$5,941		\$178,237	\$178,237	6	Undetermined/Unqualified	0.00%	\$0	11	\$0	30
2007	51007466	Crown Water Plant	TPG	52229	\$702,269		\$24,579,400	\$13,128,815	10	Western City and Suburbs	5.23%	\$686,417	11	\$36,717	35
2007	51007478	Morgan Pretreatment and Residuals	TPG	52235	\$1,165,879		\$40,805,768	\$39,857,013	10	Western City and Suburbs	5.23%	\$2,083,853	11	\$60,956	35
2007	51007478	Morgan Pretreatment and Residuals	TPG	52412	\$0		\$0	\$0	10	Western City and Suburbs	5.23%	\$0	11	\$0	35
2007	51007481	Trunk Main Renewal Program	TM	52001	\$28,574		\$2,000,000	\$0	6	Undetermined/Unqualified	0.00%	\$0	11	\$0	70
2007	51007482	Facilities Improvements	BLD	52001	\$5,556		\$250,000	\$0	6	Undetermined/Unqualified	0.00%	\$0	11	\$0	45
2008	51008483	Replace & rehab cranes @ Water Plants & P.S.	POE	52001	\$5,205		\$119,715	\$119,715	5	Entire System	3.35%	\$4,008	10	\$174	23
2008	51008489	GIS Build-Out @ 205 St. Clair	CHS	52001	\$48,137		\$240,685	\$240,685	5	Entire System	3.35%	\$8,058	10	\$1,612	5
2008	51008490	Water Tank Rehabilitation	PSDS	52001	\$144,531		\$7,226,554	\$6,967,774	5	Entire System	3.35%	\$233,274	10	\$4,839	50
2008	51008490	Water Tank Rehabilitation	PSDS	52229	\$0		\$0	\$0	5	Entire System	3.35%	\$0	10	\$0	50
2008	51008491	Roof Rehabilitation and Replacement at Non-Plant Facilities	BLD	52001	\$22,612		\$1,017,545	\$1,017,545	5	Entire System	3.35%	\$34,066	10	\$757	45
2008	51008497	General Engineering Services - Phase V	MISC	52001	\$104,623		\$3,452,545	\$3,245,564	6	Undetermined/Unqualified	0.00%	\$0	10	\$0	33
2008	51008603	Replacement of Turbidimeters	TPG	52001	\$864		\$30,240	\$30,240	5	Entire System	3.35%	\$1,012	10	\$29	35
2008	51008605	Payment Remittance Processing	MISC	52001	\$13,636		\$450,000	\$414,034	5	Entire System	3.35%	\$13,861	10	\$457	33
2008	51008606	Gas Chromatograph & Appertinances	TPCS	52001	\$4,134		\$62,011	\$62,011	5	Entire System	3.35%	\$2,076	10	\$138	15
2008	51008607	Replacement of Large Submersible Pumps at Various Stations	PSG	52001	\$1,333		\$40,000	\$40,000	6	Undetermined/Unqualified	0.00%	\$0	10	\$0	30
2008	51008608	Replacement of Large Valve Actuators for Independence St	PSG	52001	\$1,767		\$53,000	\$47,625	5	Entire System	3.35%	\$1,594	10	\$59	30
2009	51009102	Property Acquisition @ 4204 Harvard Ave.	NA	52001	\$0		\$68,000	\$68,000	5	Entire System	3.35%	\$2,277	9	\$0	NA
2009	51009106	Morgan Chemical Facility	TPCS	52229	\$1,168,094		\$17,521,405	\$17,078,064	10	Western City and Suburbs	5.23%	\$892,896	9	\$61,072	15
2009	51009106	Morgan Chemical Facility	TPCS	52235	\$0		\$0	\$0	10	Western City and Suburbs	5.23%	\$0	9	\$0	15
2009	51009107	Energy Management	PSES	52001	\$46,512		\$2,000,000	\$0	6	Undetermined/Unqualified	0.00%	\$0	9	\$0	43
2009	51009110	Harvard Yards Facility Modifications	PSG	52001	\$28,910		\$867,315	\$663,096	5	Entire System	3.35%	\$22,200	9	\$968	30
2010	w10113	Transmission Main Renewal Program	TM	52235	\$114,286		\$8,000,000	\$1,951,							

Appendix B

Table 3
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Network Inch-Miles-Based Valuation

Year	Project Number	Description	Cost Indices		Original Cost	Accum. Depreciation	Original Cost Less Depreciation	RCNLD Valuation		
			Current Date Value	Purchase Date Value				Replacement Cost New	Indexed Accum. Deprec.	Replacement Cost New Less Depreciation
1996	51096230	Harvard Avenue Bridge Water Main	9,308	5,620	\$5,563	\$1,748	\$3,814	\$9,213	\$2,895	\$6,317
1996	51096232	Water Tank Inspection Program	9,308	5,620	\$4,692	\$3,441	\$1,251	\$7,771	\$5,699	\$2,072
1996	51096233	Parma Reservoir Rehab	9,308	5,620	\$696,158	\$225,228	\$470,931	\$1,152,997	\$373,028	\$779,969
1996	51096236	1996/1997 Trunk Main Cleaning & Lining	9,308	5,620	\$95,474	\$30,006	\$65,468	\$158,127	\$49,697	\$108,430
1996	51096242	Demolish Various Non-Operative Stations	9,308	5,620	\$0	\$0	\$0	\$0	\$0	\$0
1996	51096247	City-Wide GIS	9,308	5,620	\$1,188,835	\$1,188,835	\$0	\$1,968,982	\$1,968,982	\$0
1997	51097254	Hand Held Meter Reading System	9,308	5,825	\$62,361	\$37,417	\$24,945	\$99,650	\$59,790	\$39,860
1997	51097255	Distribution System Hydraulic Model	9,308	5,825	\$166,436	\$49,931	\$116,505	\$265,055	\$79,766	\$186,169
1997	51097264	PEP Phase I - Design	9,308	5,825	\$2,373,609	\$1,424,165	\$949,444	\$3,792,884	\$2,275,731	\$1,517,154
1998	51098276	Cost of Issuance - Series I Bonds	9,308	5,920	\$26,406	\$11,736	\$14,670	\$41,517	\$18,452	\$23,065
1998	51098277	Tower Painting and Maintenance	9,308	5,920	\$419,285	\$279,523	\$139,762	\$659,240	\$439,493	\$219,747
1998	51098278	Trunk Main Cleaning & Lining - Area 98-12	9,308	5,920	\$52,001	\$14,858	\$37,144	\$81,762	\$23,360	\$58,401
1999	51099281	Brookpark Water Main Relocation	9,308	6,060	\$21,364	\$5,799	\$15,566	\$32,815	\$8,907	\$23,908
1999	51099282	Chlorine Tank Visker Handling	9,308	6,060	\$9,816	\$9,816	\$0	\$15,230	\$15,230	\$0
1999	51099287	Replace Water Pump Impellers	9,308	6,060	\$0	\$0	\$0	\$0	\$0	\$0
1999	51099288	Repair Ball Valve for Pump	9,308	6,060	\$0	\$0	\$0	\$0	\$0	\$0
2000	51000302	Denison Ave. Bridge - 12" & 30" Water Mains	9,308	6,221	\$14,639	\$3,764	\$10,875	\$21,904	\$5,632	\$16,271
2000	51000310	Morgan Pump Station	9,308	6,221	\$2,448,094	\$1,468,857	\$979,238	\$3,662,894	\$2,197,736	\$1,465,157
2001	51001336	Water Main Specials	9,308	6,342	\$140,743	\$34,181	\$106,563	\$206,566	\$50,166	\$156,400
2001	51001341	Repair Newton Road Hwy Sluice Gate	9,308	6,342	\$8,564	\$4,160	\$4,404	\$12,569	\$6,105	\$6,464
2001	51001343	Repair of Crown Sludge Dome	9,308	6,342	\$7,686	\$3,733	\$3,953	\$11,281	\$5,479	\$5,802
2001	51001345	Engineering/Environmental Consulting	9,308	6,342	\$0	\$0	\$0	\$0	\$0	\$0
2001	51001353	Crown Residuals Press Rehab	9,308	6,342	\$108,196	\$52,553	\$55,644	\$158,797	\$77,130	\$81,667
2001	51001501	Equipment for Distribution Mains	9,308	6,342	\$9,140	\$2,220	\$6,920	\$13,414	\$3,258	\$10,156
2001	51001503	Spectrometer and Accessories	9,308	6,342	\$2,936	\$2,170	\$766	\$4,310	\$3,185	\$1,124
2001	51001504	Distribution System Instruments	9,308	6,342	\$2,421	\$1,789	\$632	\$3,553	\$2,626	\$927
2001	51001518	Installation & Testing LAN	9,308	6,342	\$26,306	\$26,306	\$0	\$38,609	\$38,609	\$0
2001	51001520	Configuring, Monitoring, Troubleshooting	9,308	6,342	\$12,254	\$6,313	\$5,941	\$17,985	\$9,265	\$8,720
2001	51001522	Require K, Repair/Replacement SCADA	9,308	6,342	\$41,671	\$28,336	\$13,335	\$61,160	\$41,588	\$19,571
2002	51002364	Security Contracts/Professional Services	9,308	6,538	\$1,079,862	\$253,569	\$556,292	\$1,537,374	\$745,394	\$791,981
2002	51002366	Water Tank Inspection Cycle E	9,308	6,538	\$0	\$0	\$0	\$0	\$0	\$0
2002	51002372	General Engineering Services	9,308	6,538	\$0	\$0	\$0	\$0	\$0	\$0
2002	51002376	Roof Repair and Replacement	9,308	6,538	\$150,414	\$53,491	\$96,924	\$214,141	\$76,139	\$138,002
2002	51002380	PEP Program Management Phase II	9,308	6,538	\$1,019,521	\$494,313	\$525,208	\$1,451,468	\$703,742	\$747,726
2002	51002530	Financial Information Budget Software	9,308	6,538	\$25,134	\$12,186	\$12,948	\$35,783	\$17,349	\$18,434
2002	51002531	Electronic Document Management System	9,308	6,538	\$33,593	\$16,288	\$17,306	\$47,826	\$23,188	\$24,638
2002	51002532	Work Management System	9,308	6,538	\$180,688	\$87,606	\$93,082	\$257,242	\$124,723	\$132,518
2003	51003559	CIS Assessment/Design & Implementation	9,308	6,694	\$1,159,719	\$527,145	\$632,574	\$1,612,589	\$732,995	\$879,594
2003	51003560	Automatic Hardware & Software	9,308	6,694	\$28,943	\$0	\$0	\$40,245	\$0	\$40,245
2003	51003563	Various Engineering Prof. Services	9,308	6,694	\$0	\$0	\$0	\$0	\$0	\$0
2004	51004416	Pump & Motor Impellers - Various Stations	9,308	7,115	\$12,025	\$6,734	\$5,291	\$15,731	\$8,810	\$6,922
2004	51004417	Electrical Power Reliability	9,308	7,115	\$809,939	\$263,701	\$546,238	\$1,059,580	\$344,980	\$714,601
2004	51004420	General Engineering Services	9,308	7,115	\$0	\$0	\$0	\$0	\$0	\$0
2004	51004427	Harvard Yards Building Improvements	9,308	7,115	\$46,459	\$21,681	\$24,778	\$60,779	\$28,364	\$32,415
2004	51004428	Water Tank Valve	9,308	7,115	\$5,631	\$3,153	\$2,478	\$7,387	\$4,125	\$3,261
2004	51004520	Monitoring Capital Projects	9,308	7,115	\$40,755	\$17,290	\$23,465	\$53,317	\$22,619	\$30,698
2004	51004571	Network Back-Up at 205 St. Clair	9,308	7,115	\$32,150	\$32,150	\$0	\$42,059	\$42,059	\$0
2004	51004572	Switchgear & Motor Control Repairs	9,308	7,115	\$15,745	\$9,584	\$6,161	\$20,598	\$12,538	\$8,060
2004	51004580	Biological Testing Equipment	9,308	7,115	\$1,835	\$1,117	\$718	\$2,401	\$1,461	\$940
2004	51004587	Chemical Feeder Process Improvements	9,308	7,115	\$0	\$0	\$0	\$0	\$0	\$0
2005	51004535	Crown Water Main Plant	9,308	7,446	\$11,253	\$4,180	\$7,073	\$14,067	\$5,253	\$8,814
2005	51005440	Morgan Filter Rehab Construction	9,308	7,446	\$1,371,145	\$509,282	\$861,862	\$1,714,023	\$636,637	\$1,077,386
2005	51005443	Morgan Pump Station Demolition	9,308	7,446	\$90,315	\$39,136	\$51,178	\$112,899	\$48,923	\$63,976
2005	51006452	Meter Automation AMR - Old - Large Meter Right Sizing	9,308	7,446	\$1,560,594	\$579,649	\$980,945	\$1,950,848	\$724,601	\$1,226,247
2006	51006452	Morgan East Reservoir	9,308	7,749	\$2,045,802	\$818,321	\$1,227,481	\$2,457,275	\$982,910	\$1,474,365
2006	51006452	Morgan East Reservoir	9,308	7,749	\$0	\$0	\$0	\$0	\$0	\$0
2006	51006459	Renovations 1201 Lakeside	9,308	7,749	\$50,321	\$13,419	\$36,902	\$60,442	\$16,118	\$44,324
2006	51006460	Warehouse Improvements Ph I & II	9,308	7,749	\$353,639	\$94,304	\$259,335	\$424,767	\$113,271	\$311,496
2006	51006461	General Engineering Services	9,308	7,749	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007465	Raw Water Monitoring System	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007466	Crown Water Plant	9,308	7,971	\$686,417	\$215,731	\$470,686	\$801,600	\$251,931	\$549,668
2007	51007478	Morgan Pretreatment and Residuals	9,308	7,971	\$2,083,853	\$654,925	\$1,428,928	\$2,433,531	\$764,824	\$1,668,707
2007	51007478	Morgan Pretreatment and Residuals	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007481	Trunk Main Renewal Program	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007482	Facilities Improvements	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008483	Replace & rehab cranes @ Water Plants & P.S.	9,308	8,311	\$4,008	\$1,743	\$2,265	\$4,489	\$1,952	\$2,537
2008	51008489	GIS Build-Out @ 205 St. Clair	9,308	8,311	\$8,058	\$8,058	\$0	\$9,024	\$9,024	\$0
2008	51008490	Water Tank Rehabilitation	9,308	8,311	\$233,274	\$46,655	\$186,619	\$261,254	\$52,251	\$209,003
2008	51008490	Water Tank Rehabilitation	9,308	8,311	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008491	Roof Rehabilitation and Replacement at Non-Plant Facilities	9,308	8,311	\$34,066	\$7,570	\$26,496	\$38,152	\$8,478	\$29,674
2008	51008497	General Engineering Services - Phase V	9,308	8,311	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008603	Replacement of Turbidimeters	9,308	8,311	\$1,012	\$289	\$723	\$1,134	\$324	\$810
2008	51008605	Payment Remittance Processing	9,308	8,311	\$13,861	\$4,200	\$9,661	\$15,524	\$4,704	\$10,820
2008	51008606	Gas Chromatograph & Appertenances	9,308	8,311	\$2,076	\$1,384	\$692	\$2,325	\$1,550	\$775
2008	51008607	Replacement of Large Submersible Pumps at Various Sites	9,308	8,311	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008608	Replacement of Large Valve Actuators for Independence S	9,308	8,311	\$1,594	\$531	\$1,063	\$1,786	\$585	\$1,199
2009	51009102	Property Acquisition @ 4204 Harvard Ave.	9,308	8,570	\$2,277	\$0	\$2,277	\$2,473	\$0	\$2,473
2009	51009106	Morgan Chemical Facility	9,308	8,570	\$892,896	\$535,738	\$357,159	\$969,773	\$581,864	\$387,909
2009	51009106	Morgan Chemical Facility	9,308	8,570	\$0	\$0	\$0	\$0	\$0	\$0
2009	51009107	Energy Management	9,308	8,570	\$0	\$0	\$0	\$0	\$0	\$0
2009	51009110	Harvard Yards Facility Modifications	9,308	8,570	\$22,200	\$6,660	\$15,540	\$24,111	\$7,233	\$16,878
2010	w10113	Transmission Main Renewal Program	9,308	8,802	\$65,350	\$7,469	\$57,881	\$69,104	\$7,898	\$61,206
2010	w10116	General Engineering Services Ph. VI	9,308	8,802	\$0	\$0	\$0	\$0	\$0	\$0
2010	w10119	Security Upgrades & Improvements	9,308	8,802	\$9,314	\$2,258	\$7,056	\$9,849	\$2,388	\$7,461
2010	w10613	Security/CNL Project	9,308	8,802	\$1,339	\$325	\$1,015	\$1,416	\$343	\$1,073
2010	w10616	GIS SAN	9,308	8,802	\$5,548	\$5,548	\$0	\$5,867	\$5,867	\$0
2011	w11125	Morgan Raw Water Pump Station Improvements	9,308	9,070	\$282,685	\$65,960	\$216,725	\$290,109	\$67,692	\$222,417
2011	w11125	Morgan Raw Water Pump Station Improvements	9,308	9,070	\$0	\$0	\$0	\$0	\$0	\$0
2011	w11132	1825 Lakeside Avenue Improvements	9,308	9,070	\$4,493	\$699	\$3,794	\$4,611	\$717	\$3,894
2011	w11619	Purchase of Laboratory Equipment	9,308	9,070	\$0	\$0	\$0	\$0	\$0	\$0
2012	w12139	General Engineering Services VII	9,308	9,308	\$0	\$0	\$0	\$0	\$0	\$0
2012	w12141	Control Systems Rehab	9,308	9,308	\$4,191	\$1,006	\$3,185	\$4,191	\$1,006	\$3,185
2012	w12146	800 Mhz Radio	9,308	9,308	\$94,409	\$24,628	\$69,780	\$94,409	\$24,628	\$69,780
2012	w12147	800 Mhz Radio "A"	9,308	9,308	\$109,074	\$28,454	\$80,620	\$109,074	\$28,454	\$80,620
2012	w12620	Distribution and Maintenance Equipment	9,308	9,308	\$766	\$200	\$566	\$766	\$200	\$566
2012	w12621	Computer Hardware 2012	9,308	9,308	\$15,199	\$15,199	\$0	\$15,199	\$15,199	\$0
2012	w12622	Vehicles 2012	9,308	9,308	\$0	\$0	\$0	\$0	\$0	\$0
2012	w12624	Utility Vehicles (Gators)	9,308	9,308	\$0	\$0	\$0	\$0	\$0	\$0
2013	w13155	Secondary Station Improvements Cycle F	9,308	9,308	\$148,412	\$24,735	\$123,677	\$148,412	\$24,735	\$123,677
2013	w13627	Portable Potable Water Dispensing Trailer	9,308	9,308	\$1,476	\$738	\$738	\$1,476	\$738	\$738
2013	w13628	Computer Hardware & Software 2013	9,308	9,308	\$6,165	\$6,165	\$0	\$6,165	\$6,165	\$0

Appendix B

Table 4
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Network Miles-Based Valuation

Cost: 1 = Current Approp.; 2 = Expend to Date

Year	Project Number	Description	Asset Type	Funding Source	Depreciation	Accumulated Depreciation	Original Cost	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Original Cost to Westlake	Age	Annual Depreciation to Westlake	Assigned Asset Life
1981		Meters	M		\$11,932		\$3,317,621	\$3,317,621	5	Entire System	3.11%	\$1,21,773	37	\$3,479	35
1982		Trunk Main Ridge Rd.	TM		\$10,767		\$753,685	\$753,685	2	Western Suburbs	8.09%	\$61,009	36	\$872	70
1982		Increase First High Service	DO		\$2,471		\$173,000	\$173,000	5	Entire System	3.11%	\$5,377	36	\$77	70
1982		Study for discharge piping	DO		\$47		\$3,258	\$3,258	6	Undetermined/Unqualified	0.00%	\$0	36	\$0	70
1983		Expand Crown Filter	TPG		\$650		\$22,736	\$22,736	2	Western Suburbs	8.09%	\$1,840	35	\$53	35
1983		Division Filter Strip - Shu	TPG		\$2,535		\$88,711	\$88,711	10	Western City and Suburbs	4.77%	\$4,232	35	\$121	35
1983		Rehab Sub Electric Facilities	PSES		\$1		\$60	\$60	6	Undetermined/Unqualified	0.00%	\$0	35	\$0	43
1984		Cleaning & Relining Program	TPG		\$25,690		\$1,798,297	\$1,798,297	5	Entire System	3.11%	\$55,897	34	\$799	35
1984		Piometer Survey of Distribution	MISC		\$14,900		\$491,693	\$491,693	5	Entire System	3.11%	\$15,284	34	\$463	33
1984		ODOT Force Account 1480	TM		\$8,638		\$604,640	\$604,640	5	Entire System	3.11%	\$18,794	34	\$268	70
1984		Cleaning & Relining Mains by CWD	DM		\$32		\$2,210	\$2,210	6	Undetermined/Unqualified	0.00%	\$0	34	\$0	70
1984		Cleaning & Relining Mains	DM		\$19,491		\$1,364,375	\$1,364,375	5	Entire System	3.11%	\$42,410	34	\$606	70
1984		Preliminary Eng Division set	MISC		\$12		\$400	\$400	6	Undetermined/Unqualified	0.00%	\$0	34	\$0	33
1985		Replace Roofing System at Facility	BLD		\$3,915		\$162,653	\$162,653	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	45
1985		Restore Backwash Water Reservoir	TPG		\$196		\$6,855	\$6,855	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Clean & Relining Water mains	DM		\$29,113		\$2,037,884	\$2,037,884	5	Entire System	3.11%	\$63,345	33	\$905	70
1985		Clean & Relining Water mains	DM		\$521		\$36,483	\$36,483	5	Entire System	3.11%	\$1,134	33	\$16	70
1985		Crown Intake Restoration	SIST		\$18,668		\$1,642,811	\$1,642,811	2	Western Suburbs	8.09%	\$132,982	33	\$1,511	88
1985		Clean & Relining Supply Mains	DM		\$32,465		\$2,272,543	\$2,272,543	5	Entire System	3.11%	\$70,639	33	\$1,009	70
1985		Install Telemetering - Seven Hills	M		\$1		\$46	\$46	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Replace Roof-Radio Repair	BLD		\$889		\$39,990	\$39,990	5	Entire System	3.11%	\$1,243	33	\$28	45
1985		Clean & reline 85K Ft Mains	DM		\$44,512		\$3,115,850	\$3,115,850	5	Entire System	3.11%	\$96,852	33	\$1,384	70
1985		Electrification at Division	TPG		\$2		\$67	\$67	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Electrification at Division	TPG		\$790		\$27,654	\$27,654	10	Western City and Suburbs	4.77%	\$1,319	33	\$38	35
1985		New Filtration Facilities	TPG		\$743		\$25,999	\$25,999	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	35
1985		Consulting	MISC		\$3,726		\$122,953	\$122,953	6	Undetermined/Unqualified	0.00%	\$0	33	\$0	33
1985		Crown Intake Ditching	SIST		\$1,795		\$157,970	\$157,970	2	Western Suburbs	8.09%	\$12,787	33	\$145	88
1985		Clean & Line Mains 1985	DM		\$33,946		\$2,376,236	\$2,376,236	5	Entire System	3.11%	\$73,862	33	\$1,055	70
1986		Division Rehabilitation	TPG		\$2,976,574		\$104,180,086	\$104,180,086	10	Western City and Suburbs	4.77%	\$4,969,667	32	\$141,990	35
1986		Division Rehabilitation/Professional services	MISC		\$327,547		\$10,809,067	\$10,809,067	10	Western City and Suburbs	4.77%	\$515,621	32	\$15,625	33
1986		Crown sludge Rehab	TPG		\$219,500		\$7,682,507	\$7,682,507	2	Western Suburbs	8.09%	\$621,881	32	\$17,768	35
1986		Crown Masonry Rehab	BLD		\$5,524		\$248,558	\$248,558	2	Western Suburbs	8.09%	\$20,120	32	\$447	45
1986		Piometer service	TPG		\$8,233		\$288,171	\$288,171	5	Entire System	3.11%	\$8,957	32	\$256	35
1986		Kirtland Parking Garage	PKG		\$2,885		\$86,553	\$86,553	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	30
1986		Palma Control SCADA System	ELEC		\$53,613		\$1,340,333	\$1,340,333	5	Entire System	3.11%	\$41,662	32	\$1,666	25
1986		Clean & Relining Mains 1985	DM		\$53		\$3,712	\$3,712	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	70
1986		Water Main, Fulton- Denison	TM		\$731		\$51,202	\$51,202	2	Western Suburbs	8.09%	\$4,145	32	\$59	70
1986		Water Main, Fulton-Brackville	TM		\$688		\$48,150	\$48,150	2	Western Suburbs	8.09%	\$3,898	32	\$56	70
1986		Engineering Study	MISC		\$94		\$3,118	\$3,118	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	33
1986		Crown Intake Restoration	SIST		\$258		\$22,739	\$22,739	2	Western Suburbs	8.09%	\$1,841	32	\$21	88
1986		Crown, Restone WW System	TPG		\$3,844		\$134,525	\$134,525	2	Western Suburbs	8.09%	\$10,889	32	\$311	35
1986		DPU Building	BLD		\$450		\$20,235	\$20,235	5	Entire System	3.11%	\$629	32	\$14	45
1986		Water Main, Various Culvert	DM		\$1,412		\$98,840	\$98,840	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	70
1986		Crown-Sprague Main Part 2	TM		\$52,200		\$3,653,992	\$3,653,992	2	Western Suburbs	8.09%	\$295,782	32	\$4,225	70
1986		Replace Tap Shoes & DIV	TPG		\$124		\$4,353	\$4,353	6	Undetermined/Unqualified	0.00%	\$0	32	\$0	35
1986		Crown - Sprague Main Part 1	TM		\$24,359		\$1,705,125	\$1,705,125	2	Western Suburbs	8.09%	\$138,026	32	\$1,972	70
1986		DPU Building, Replace Roof	BLD		\$2,748		\$123,664	\$123,664	5	Entire System	3.11%	\$3,844	32	\$85	45
1986		Cleaning & Lining Supply Main	TM		\$84,210		\$5,894,714	\$5,894,714	5	Entire System	3.11%	\$183,228	32	\$2,618	70
1986		Restore Reservoir Tank-Engle	PSDS		\$4,645		\$232,250	\$232,250	2	Western Suburbs	8.09%	\$18,800	32	\$376	50
1986		Painting Reservoir Tank-Engle	PSPT		\$2,323		\$69,680	\$69,680	2	Western Suburbs	8.09%	\$5,640	32	\$188	30
1986		Replace Tap Sleeve- Division	TPG		\$7,915		\$277,015	\$277,015	10	Western City and Suburbs	4.77%	\$13,214	32	\$378	35
1986		Harvard Yard Property Expansion	NA		\$0		\$338,500	\$338,500	5	Entire System	3.11%	\$10,522	32	\$0	NA
1987		Aerial Photo and Surveys	MISC		\$912		\$30,086	\$30,086	5	Entire System	3.11%	\$935	31	\$28	33
1987		Replace Crown Flocculators	TPG		\$12,934		\$452,688	\$452,688	2	Western Suburbs	8.09%	\$36,644	31	\$1,047	35
1987		Crown-Sprague Main Part 3	TM		\$26,321		\$1,842,489	\$1,842,489	2	Western Suburbs	8.09%	\$149,145	31	\$2,131	70
1987		Replace Crown Boilers	TPG		\$8,519		\$298,178	\$298,178	2	Western Suburbs	8.09%	\$24,137	31	\$690	35
1987		Crown-Sprague Main Sec 1 - 4A	TM		\$24,526		\$1,716,853	\$1,716,853	2	Western Suburbs	8.09%	\$138,975	31	\$1,985	70
1987		Crown-Sprague Main Sec 1 - 4B	TM		\$32,344		\$2,264,082	\$2,264,082	2	Western Suburbs	8.09%	\$183,272	31	\$2,618	70
1987		Fulton -Brackville Supply main Sec1	TM		\$42,961		\$3,007,297	\$3,007,297	2	Western Suburbs	8.09%	\$243,434	31	\$3,478	70
1987		Fulton -Brackville Supply main Sec1	TM		\$42,783		\$2,994,824	\$2,994,824	2	Western Suburbs	8.09%	\$242,424	31	\$3,463	70
1987		Brookpark-Deering Supply Main	TM		\$76,877		\$5,381,391	\$5,381,391	2	Western Suburbs	8.09%	\$435,611	31	\$6,223	70
1987		Crown Low Service Supply Main	TM		\$4,957		\$346,964	\$346,964	2	Western Suburbs	8.09%	\$28,086	31	\$401	70
1987		Fulton-Denison-Bigpark Supply Main	TM		\$68,835		\$4,818,473	\$4,818,473	2	Western Suburbs	8.09%	\$380,044	31	\$5,572	70
1987		1980 Cleaning & Lining	DM		\$177,606		\$5,432,430	\$5,432,430	5	Entire System	3.11%	\$168,859	31	\$2,412	70
1987		Division-Farmington Boiler Replacement	TPG		\$21,854		\$764,904	\$764,904	5	Entire System	3.11%	\$23,776	31	\$679	35
1987		Aerial Photo Mapping Survey	MISC		\$9,802		\$323,474	\$323,474	5	Entire System	3.11%	\$10,055	31	\$305	33
1988	5108806	Harvard Yards - Professional Services	MISC		\$58,438		\$1,928,444	\$1,928,444	5	Entire System	3.11%	\$59,943	30	\$1,816	33
1988		Crown Plant Neutralization System	TPG		\$2,916		\$102,073	\$102,073	2	Western Suburbs	8.09%	\$8,263	30	\$236	35
1988		Division Dam Board Installation	SO		\$3,804		\$108,112	\$108,112	10	Western City and Suburbs	4.77%	\$5,157	30	\$172	30
1988		Rehabilitation Harvard Yards Prof. Serv	MISC		\$6,830		\$1,875,405	\$1,875,405	6	Undetermined/Unqualified	0.00%	\$0	30	\$0	43
1988		Pump Station Battery Installation	PSES		\$1,001		\$43,022	\$43,022	6	Undetermined/Unqualified	0.00%	\$0	30	\$0	43
1988		Water Bldg at Crown Plant	BLD		\$698		\$31,393	\$31,393	2	Western Suburbs	8.09%	\$2,541	30	\$56	45
1988		1989 Cleaning & Relining Program	DM		\$138,537		\$9,697,620	\$9,697,620	5	Entire System	3.11%	\$301,436	30	\$4,306	70
1988		Install Cathod Protect Sys	PSES		\$5,700		\$245,110	\$245,110	5	Entire System	3.11%	\$7,619	30	\$177	43
1989	5108900	Refine Liquid Alum Tanks	TPCS		\$13,266		\$198,990	\$198,990	6	Undetermined/Unqualified	0.00%	\$0	29	\$0	15
1989	5108902	Harvard-Deering Pump Capacitor	PSES		\$6,701		\$288,163	\$288,163	5	Entire System	3.11%	\$9,030	29	\$0	43
1989	5108903	Palma Control Ctr Renovation	TPG		\$172,848		\$7,432,481	\$7,432,481	5	Entire System	3.11%	\$231,028	29	\$5,373	43
1989	5108904	Harvard Yards - Construction	PSG		\$1,041,485	\$0	\$1,244,542	\$1,244,542	5	Entire System	3.11%	\$971,190	29	\$32,373	30
1989	5108906	Repair Twin Conduit at Division	PSES		\$14,848		\$638,443	\$638,443	10	Western City and Suburbs	4.77%	\$30,455	29	\$708	43
1990	5109020	1990 Cleaning & Relining Program	DM		\$116,663		\$8,166,415	\$8,166,415	5	Entire System	3.11%	\$253,841	28	\$3,626	70
1990	5109024	Division - Northfield Road Imp.	BLD		\$852		\$38,321	\$38,321	6	Undetermined/Unqualified	0.00%	\$0	28	\$0	45
1990	5109026	Main Station Site Improvements	PSG		\$119,947		\$3,580,412	\$3,580,412	5	Entire System	3.11%	\$111,292	28	\$3,710	70
1990	5109028	Aerial Photo / Mapping Project	MISC		\$627		\$20,685	\$20,685	5	Entire System	3.11%	\$643	28	\$19	33
1990	5109030	Clean & Reline Trunk Mains 9	TPG		\$81,079		\$5,675,529	\$5,675,529	5	Entire System	3.11%	\$176,415	28	\$2,520	70
1990	5109031	Division Surge Tank Insulation	TM		\$2,398		\$83,930	\$83,930	10	Western City and Suburbs	4.77%	\$4,004	28	\$114	35
1990	5109032	Chlorine Detection Systems	TPCS		\$4,691		\$70,371	\$70,371	5	Entire System	3.11%	\$2,187	28	\$146	15
1990	5109037	Paint Dovers & Brackville Towers	PSPT		\$20,723		\$621,700	\$621,700	2	Western Suburbs	8.09%	\$50,325	28	\$1,678	30
1991	5109142	Relining Trunk Mains 91/92	TM		\$33,261		\$2,329,700	\$2,329,700	5	Entire System	3.11%	\$72,415	27	\$1,035	70
1991	5109145	Radical Various Water Mains	DM		\$40,919		\$2,864,343	\$2,864,343	6	Undetermined/Unqualified	0.00%	\$0	27	\$0	

Appendix B

Table 4
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Network Miles-Based Valuation

Year	Project Number	Description	Cost Indices		Original Cost	Accum. Depreciation	Original Cost Less Depreciation	RCNLD Valuation		
			Current Date Value	Purchase Date Value				Replacement Cost New	Indexed Accum. Deprec.	Replacement Cost New Less Depreciation
1981		Meters	9.308	3.836	\$121,773	\$121,773	\$0	\$320,641	\$320,641	\$0
1982		Trunk Main Ridge Rd.	9.308	3.825	\$61,009	\$31,376	\$29,633	\$148,463	\$76,353	\$72,111
1982		Increase First High Service	9.308	3.825	\$5,377	\$2,766	\$2,612	\$13,086	\$6,730	\$6,356
1982		Study for discharge piping	9.308	3.825	\$0	\$0	\$0	\$0	\$0	\$0
1983		Expand Crown Filter	9.308	4.056	\$1,840	\$1,840	\$0	\$4,224	\$4,224	\$0
1983		Division Filter Study - Shru	9.308	4.056	\$4,232	\$4,232	\$0	\$9,711	\$9,711	\$0
1983		Rehab Sub Electric Facilities	9.308	4.056	\$0	\$0	\$0	\$0	\$0	\$0
1984		Cleaning & Relining Program	9.308	4.146	\$55,897	\$27,150	\$28,747	\$125,483	\$60,954	\$64,539
1984		Pliometer Survey of Distribution	9.308	4.146	\$15,284	\$15,284	\$0	\$34,312	\$34,312	\$0
1984		ODOT Force Account 1480	9.308	4.146	\$18,794	\$9,129	\$9,666	\$42,194	\$20,494	\$21,700
1984		Cleaning & Relining Mains by CWD	9.308	4.146	\$0	\$0	\$0	\$0	\$0	\$0
1984		Cleaning & Relining Mains	9.308	4.146	\$42,410	\$20,599	\$21,811	\$95,212	\$46,246	\$48,966
1984		Preliminary Eng Division set	9.308	4.146	\$0	\$0	\$0	\$0	\$0	\$0
1985		Replace Roofing System at Facility	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Restore Backwash Water Reservoir	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Clean & Relining Water mains	9.308	4.195	\$63,345	\$29,862	\$33,482	\$140,551	\$66,260	\$74,291
1985		Clean & Relining Water mains	9.308	4.195	\$1,134	\$535	\$599	\$2,516	\$1,186	\$1,330
1985		Crown Intake Restoration	9.308	4.195	\$132,982	\$49,868	\$83,114	\$295,064	\$110,649	\$184,415
1985		Clean & Relining Supply Mains	9.308	4.195	\$70,639	\$33,301	\$37,338	\$156,735	\$73,889	\$82,846
1985		Install Telemetering - Seven Hills	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Replace Roof-Radio Repair	9.308	4.195	\$1,243	\$912	\$331	\$2,758	\$2,023	\$735
1985		Clean & reline 85K Ft Mains	9.308	4.195	\$96,852	\$45,659	\$51,193	\$214,897	\$101,309	\$113,589
1985		Electrification at Division	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Electrification at Division	9.308	4.195	\$1,319	\$1,244	\$75	\$2,927	\$2,760	\$167
1985		New Filtration Facilities	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Consulting	9.308	4.195	\$0	\$0	\$0	\$0	\$0	\$0
1985		Crown Intake Diving	9.308	4.195	\$12,787	\$4,795	\$7,992	\$28,373	\$10,640	\$17,733
1985		Clean & Line Mains 1985	9.308	4.195	\$73,862	\$34,821	\$39,041	\$163,887	\$77,261	\$86,626
1986		Division Rehabilitation	9.308	4.295	\$4,969,667	\$4,543,695	\$425,971	\$10,770,118	\$9,846,965	\$923,153
1986		Division Rehabilitation/Professional services	9.308	4.295	\$515,621	\$499,996	\$15,625	\$1,117,439	\$1,083,578	\$33,862
1986		Crown sludge Rehab	9.308	4.295	\$621,881	\$568,577	\$53,304	\$1,347,723	\$1,232,204	\$115,519
1986		Crown Masonry Rehab	9.308	4.295	\$20,120	\$14,308	\$5,812	\$43,604	\$31,007	\$12,597
1986		Pliometer services	9.308	4.295	\$8,957	\$8,190	\$768	\$19,412	\$17,748	\$1,664
1986		Kirland Parking Garage	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Parma Control SCADA System	9.308	4.295	\$41,662	\$41,662	\$0	\$90,289	\$90,289	\$0
1986		Clean & Relining Mains 1985	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Water Main, Fulton- Denison	9.308	4.295	\$4,145	\$1,895	\$2,250	\$8,982	\$4,106	\$4,876
1986		Water Main, Fulton-Brackville	9.308	4.295	\$3,898	\$1,782	\$2,116	\$8,447	\$3,861	\$4,586
1986		Engineering Study	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Crown Intake Restoration	9.308	4.295	\$1,841	\$669	\$1,171	\$3,989	\$1,451	\$2,538
1986		Crown, Restore WW System	9.308	4.295	\$10,889	\$9,956	\$933	\$23,599	\$21,577	\$2,023
1986		DPU Building	9.308	4.295	\$629	\$447	\$182	\$1,363	\$969	\$394
1986		Water Main, Various Culvert	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Crown-Sprague Main Part 2	9.308	4.295	\$295,762	\$135,215	\$160,567	\$641,011	\$293,033	\$347,977
1986		Replace Tap Steers & DIV	9.308	4.295	\$0	\$0	\$0	\$0	\$0	\$0
1986		Crown - Sprague Main Part 1	9.308	4.295	\$138,026	\$63,098	\$74,928	\$299,126	\$136,743	\$162,383
1986		DPU Building, Replace Roof	9.308	4.295	\$3,844	\$2,733	\$1,110	\$8,330	\$5,924	\$2,407
1986		Cleaning & Lining Supply Main	9.308	4.295	\$183,228	\$83,762	\$99,467	\$397,087	\$181,526	\$215,562
1986		Restore Reservoir Tank-Engle	9.308	4.295	\$18,800	\$12,032	\$6,768	\$40,743	\$26,076	\$14,667
1986		Painting Reservoir Tank-Engle	9.308	4.295	\$5,640	\$5,640	\$0	\$12,224	\$12,224	\$0
1986		Replaced Tap Steers-Division	9.308	4.295	\$13,214	\$12,082	\$1,133	\$28,638	\$26,183	\$2,455
1986		Harvard Yard Property Expansion	9.308	4.295	\$10,522	\$0	\$10,522	\$22,802	\$0	\$22,802
1987		Aerial Photo and Surveys	9.308	4.406	\$935	\$879	\$57	\$1,976	\$1,856	\$120
1987		Replace Crown Flocculators	9.308	4.406	\$36,644	\$32,456	\$4,188	\$77,413	\$68,566	\$8,847
1987		Crown-Sprague Main Part 3	9.308	4.406	\$149,145	\$66,050	\$83,095	\$315,080	\$139,536	\$175,545
1987		Replace Crown Boilers	9.308	4.406	\$24,137	\$21,378	\$2,758	\$50,991	\$45,163	\$5,828
1987		Crown-Sprague Main Sec 1 - 4A	9.308	4.406	\$138,975	\$51,546	\$87,429	\$293,595	\$130,021	\$163,575
1987		Crown-Sprague Main Sec 1 - 4B	9.308	4.406	\$183,272	\$81,163	\$102,109	\$387,176	\$171,464	\$215,712
1987		Fulton - Brackville Supply main Sec1	9.308	4.406	\$243,434	\$107,806	\$135,627	\$514,272	\$227,749	\$286,523
1987		Fulton - Brackville Supply main Sec1	9.308	4.406	\$242,424	\$107,359	\$135,065	\$512,139	\$226,804	\$285,334
1987		Brookpark-Deering Supply Main	9.308	4.406	\$435,611	\$192,913	\$242,698	\$920,260	\$407,544	\$512,717
1987		Crown Low Service Supply Main	9.308	4.406	\$28,086	\$12,438	\$15,648	\$59,334	\$26,276	\$33,057
1987		Fulton-Denison-Bigark Supply Main	9.308	4.406	\$390,044	\$172,734	\$217,310	\$623,997	\$364,913	\$459,084
1987		1987 Cleaning & Lining	9.308	4.406	\$168,658	\$74,780	\$93,879	\$356,727	\$157,979	\$198,748
1987		Division-Farmount Boiler Replacement	9.308	4.406	\$23,776	\$21,059	\$2,717	\$50,228	\$44,488	\$5,740
1987		Aerial Photo Mapping Survey	9.308	4.406	\$10,055	\$9,445	\$609	\$21,241	\$19,954	\$1,287
1988	51088806	Harvard Yards - Professional Services	9.308	4.519	\$59,943	\$54,493	\$5,449	\$123,467	\$112,243	\$11,224
1988		Crown Plant Neutralization System	9.308	4.519	\$8,263	\$7,082	\$1,180	\$17,019	\$14,588	\$2,431
1988		Division Dam Board Installation	9.308	4.519	\$5,157	\$5,157	\$0	\$10,623	\$10,623	\$0
1988		Rehabilitation Harvard Yards Profit. Serv	9.308	4.519	\$0	\$0	\$0	\$0	\$0	\$0
1988		Pump Station Battery Installations	9.308	4.519	\$0	\$0	\$0	\$0	\$0	\$0
1988		Water Bldg at Crown Plant	9.308	4.519	\$2,541	\$1,694	\$847	\$5,234	\$3,489	\$1,745
1988		1989 Cleaning & Relining Program	9.308	4.519	\$301,436	\$129,187	\$172,249	\$620,882	\$266,092	\$354,790
1988		Install Cathod Protect Sys	9.308	4.519	\$7,619	\$5,315	\$2,303	\$15,693	\$10,949	\$4,744
1989	51089900	Reline Liquid Alum Tanks	9.308	4.815	\$0	\$0	\$0	\$0	\$0	\$0
1989	51089902	Remove/Replace PCB Capacitor	9.308	4.815	\$0	\$0	\$0	\$0	\$0	\$0
1989	51089903	Parma Control Ctr Renovation	9.308	4.815	\$231,028	\$155,809	\$75,218	\$446,605	\$301,199	\$145,406
1989	51089904	Harvard Yards - Construction	9.308	4.815	\$971,190	\$938,817	\$32,373	\$1,877,432	\$1,814,851	\$62,581
1989	51089908	Repair Twin Conduit at Division	9.308	4.815	\$30,455	\$20,540	\$9,915	\$58,874	\$39,706	\$19,168
1989	51090020	1990 Cleaning & Relining Program	9.308	4.732	\$253,841	\$101,536	\$152,305	\$499,313	\$199,725	\$299,588
1990	51090024	Division - Northfield Road Imp.	9.308	4.732	\$0	\$0	\$0	\$0	\$0	\$0
1990	51090026	Main Station Site Improvements	9.308	4.732	\$111,292	\$103,872	\$7,419	\$218,915	\$204,320	\$14,594
1990	51090028	Aerial Photo / Mapping Project	9.308	4.732	\$643	\$546	\$97	\$1,285	\$1,073	\$212
1990	51090030	Clean & Reline Trunk Mains 9	9.308	4.732	\$176,415	\$70,566	\$105,849	\$347,015	\$138,806	\$208,209
1990	51090031	Division Surge Tank Insulation	9.308	4.732	\$4,004	\$3,203	\$801	\$7,875	\$6,300	\$1,575
1990	51090032	Chlorine Detection Systems	9.308	4.732	\$2,187	\$2,187	\$0	\$4,303	\$4,303	\$0
1990	51090037	Paint Dover & Brecksville Towers	9.308	4.732	\$50,325	\$46,970	\$3,355	\$98,991	\$92,392	\$6,599
1991	51091942	Relining Trunk Mains 91/92	9.308	4.835	\$72,415	\$27,932	\$44,484	\$139,409	\$53,772	\$85,637
1991	51091945	Rebuild Vandal Water Mains	9.308	4.835	\$0	\$0	\$0	\$0	\$0	\$0
1991	51091946	Crown Plant Roof Replacement	9.308	4.835	\$15,990	\$9,594	\$6,396	\$30,784	\$18,470	\$12,313
1991	51091950	Telecommunications Systems	9.308	4.835	\$22,944	\$22,944	\$0	\$44,170	\$44,170	\$0
2005		Telecommunication System	9.308	7.446	\$0	\$0	\$0	\$0	\$0	\$0
1996		Telecommunication System	9.308	5.620	\$0	\$0	\$0	\$0	\$0	\$0
1991	51091952	Crown Plant Drainage & Rehab	9.308	4.835	\$47,449	\$36,604	\$10,846	\$91,346	\$70,467	\$20,879
1991	51091953	Rehab Tap Water Screens 4	9.308	4.835	\$0	\$0	\$0	\$0	\$0	\$0
1991	51091955	Crown Plant Expansion Profit Sys	9.308	4.835	\$1,512,689	\$1,237,655	\$275,034	\$2,912,122	\$2,382,645	\$529,477
1992	51092960	800 Mhz Radio System-Professional Services	9.308	4.985	\$0	\$0	\$0	\$0	\$0	\$0
1992	51092965	Morgan Pump Bldg. Renovation	9.308	4.985	\$94,824	\$54,787	\$40,037	\$177,055	\$102,298	\$74,756
1992	51092966	Clean & Line Trunk Mains 92	9.308	4.985	\$66,660	\$24,759	\$41,901	\$124,467	\$46,231	\$78,237
1992	51092968	800 Mhz Radio System-Construction	9.308	4.985	\$0	\$0	\$0	\$0	\$0	\$0
1992	51092973	Lakewood 201 & 825 Lakewood Ave	9.308	4.985	\$605,980	\$350,120	\$255,860	\$1,131,486	\$653,748	\$477,739
1992	51092975	G. Morgan Pump Tank - Painting	9.308	4.985	\$7,112	\$6,164	\$948	\$13,280	\$11,510	\$1,771
1992	51092978	Clean & Line Trunk Mains 199	9.308	4.985	\$157,818	\$58,618	\$99,200	\$294,677	\$109,452	\$185,226
1992	51092980	Site Improvements Secondary Stations	9.308	4.985	\$20,087	\$17,409	\$2,678	\$37,507	\$32,506	\$5,001
1993	51093200	GIS - Professional Services	9.308	5.210	\$24,045	\$18,216	\$5,829	\$42,959	\$32,545	\$10,414
1993	51093201	Computer System Integrator Sys	9.308	5.210	\$95,416	\$95,416	\$0	\$170,467	\$170,467	\$0
1993	51093982	Clean & Line Trunk Mains 93	9.308	5.210	\$119,405	\$47,645	\$71,760	\$213,324	\$76,187	\$137,137
1993	51093983	Electronic Alarms for Stations	9.308	5.210	\$11,820	\$6,930	\$4,890	\$21,295	\$12,381	\$8,914
1993	51093985	Crown Expansion - Construction	9.308	5.210	\$9,066,494	\$6,476,067	\$2,590,427	\$16,197,8		

Appendix B

Table 4
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Network Miles-Based Valuation

Cost: 1 = Current Approp.; 2 = Expend to Date

2

Year	Project Number	Description	Asset Type	Funding Source	Depreciation	Accumulated Depreciation	Original Cost	Expenditures to Date	Code	Benefiting Party	Benefit Ratio to Westlake	Original Cost to Westlake	Age	Annual Depreciation to Westlake	Assigned Asset Life
1996	51096230	Harvard Avenue Bridge Water Main	TM		\$2,374		\$166,152	\$166,152	5	Entire System	3.11%	\$5,165	22	\$74	70
1996	51096232	Water Tank Inspection Program	PSG		\$4,672		\$140,148	\$140,148	5	Entire System	3.11%	\$4,356	22	\$145	30
1996	51096233	Parma Reservoir Rehab	SR		\$121,873		\$8,287,388	\$8,287,388	2	Western Suburbs	8.09%	\$670,845	22	\$9,865	68
1996	51096238	1996/1997 Trunk Main Cleaning & Lining	TM		\$40,739		\$2,851,756	\$2,851,756	5	Entire System	3.11%	\$88,643	22	\$1,266	70
1996	51096242	Demolish Various Non-Operative Stations	PSG		\$37,489		\$1,124,674	\$1,124,674	6	Undetermined/Unqualified	0.00%	\$0	22	\$0	30
1996	51096247	City-Wide GIS	CHS		\$7,101,977		\$35,509,886	\$35,509,886	5	Entire System	3.11%	\$1,103,772	22	\$220,754	5
1997	51097254	Hand Held Meter Reading System	MI		\$53,220		\$1,862,704	\$1,862,704	5	Entire System	3.11%	\$57,899	21	\$1,654	35
1997	51097255	Distribution System Hydraulic Model	DO		\$71,019		\$4,971,352	\$4,971,352	5	Entire System	3.11%	\$154,527	21	\$2,208	70
1997	51097264	PEP Phase I - Design	TPG		\$2,074,414		\$72,604,503	\$70,898,446	5	Entire System	3.11%	\$2,203,773	21	\$64,480	35
1998	51098276	Cost of Issuance - Series I Bonds	BLD		\$17,527		\$788,721	\$788,721	5	Entire System	3.11%	\$24,516	20	\$545	45
1998	51098277	Tower Painting and Maintenance	PSPT		\$417,460		\$12,523,813	\$12,523,813	5	Entire System	3.11%	\$389,284	20	\$12,976	30
1998	51098278	Trunk Main Cleaning & Lining - Area 98-12	TM		\$22,189		\$1,553,255	\$1,553,255	5	Entire System	3.11%	\$48,281	20	\$690	70
1999	51099281	Brookpark Water Main Relocation	TM		\$3,633		\$254,333	\$254,333	2	Western Suburbs	8.09%	\$20,588	19	\$294	70
1999	51099282	Chlorine Gas Cylinder Handling	TPC		\$19,745		\$296,175	\$296,175	5	Entire System	3.11%	\$9,206	19	\$614	15
1999	51099287	Replace Water Pump Impellers	PSMS		\$1,600		\$40,000	\$42,000	6	Undetermined/Unqualified	0.00%	\$0	19	\$0	25
1999	51099288	Repair Ball Valve for Pump	PSMS		\$1,400		\$35,000	\$36,750	6	Undetermined/Unqualified	0.00%	\$0	19	\$0	25
2000	51000302	Denison Ave. Bridge - 12" & 30" Water Mains	TM		\$4,000		\$280,000	\$280,000	10	Western City and Suburbs	4.77%	\$13,357	18	\$191	70
2000	51000310	Morgan Pump Station	PSG		\$1,560,790		\$46,823,702	\$46,823,702	10	Western City and Suburbs	4.77%	\$2,233,615	18	\$74,454	30
2001	51001336	Water Main Specials	DM		\$60,056		\$4,203,931	\$4,203,931	5	Entire System	3.11%	\$130,673	17	\$1,867	70
2001	51001341	Repair Hagen Repair Box Sluice Gate	TPG		\$4,680		\$163,803	\$163,803	10	Western City and Suburbs	4.77%	\$7,814	17	\$223	35
2001	51001343	Repair of Crown Sludge Dome	TPG		\$2,614		\$91,500	\$91,500	2	Western Suburbs	8.09%	\$7,407	17	\$212	35
2001	51001345	Engineering/Environmental Consulting	MISC		\$4,979		\$164,311	\$164,311	6	Undetermined/Unqualified	0.00%	\$0	17	\$0	33
2001	51001353	Crown Residuals Press Rehab	TPG		\$36,801		\$1,288,020	\$1,288,020	2	Western Suburbs	8.09%	\$104,262	17	\$2,979	35
2001	51001501	Equipment for Distribution Mains	DO		\$3,900		\$273,000	\$273,000	5	Entire System	3.11%	\$8,486	17	\$121	70
2001	51001503	Spectrometer and Accessories	POE		\$3,813		\$87,709	\$87,709	5	Entire System	3.11%	\$2,726	17	\$119	23
2001	51001504	Distribution System Instruments	POE		\$3,144		\$72,309	\$72,309	5	Entire System	3.11%	\$2,248	17	\$98	23
2001	51001518	Installation & Testing LAN	CHS		\$157,151		\$785,756	\$785,756	5	Entire System	3.11%	\$24,424	17	\$4,885	5
2001	51001520	Configuring, Monitoring, Troubleshooting	MISC		\$11,092		\$366,029	\$366,029	5	Entire System	3.11%	\$11,377	17	\$345	33
2001	51001522	Require K, Repair/Replacement SCADA	ELEC		\$49,788		\$1,244,691	\$1,244,691	5	Entire System	3.11%	\$38,689	17	\$1,548	25
2002	51002364	Security Contracts Professional Services	MISC		\$983,529		\$32,456,453	\$32,254,897	5	Entire System	3.11%	\$1,002,595	16	\$30,572	33
2002	51002366	Water Tank Inspection Cycle E	PSPT		\$2,903		\$87,091	\$238,400	6	Undetermined/Unqualified	0.00%	\$0	16	\$0	30
2002	51002372	General Engineering Services	MISC		\$58,093		\$1,917,074	\$1,950,000	6	Undetermined/Unqualified	0.00%	\$0	16	\$0	33
2002	51002376	Roof Repair and Replacement	POE		\$107,889		\$4,855,000	\$4,492,797	5	Entire System	3.11%	\$139,852	16	\$3,354	45
2002	51002380	PEP Program Management Phase II	MISC		\$922,805		\$30,452,555	\$30,452,542	5	Entire System	3.11%	\$946,572	16	\$28,684	33
2002	51002530	Financial Information Budget Software	MISC		\$22,750		\$750,749	\$750,749	5	Entire System	3.11%	\$23,336	16	\$707	33
2002	51002531	Electronic Document Management System	MISC		\$31,407		\$1,036,415	\$1,003,415	5	Entire System	3.11%	\$31,190	16	\$976	33
2002	51002532	Work Management System	MISC		\$163,547		\$5,397,062	\$5,397,062	5	Entire System	3.11%	\$167,760	16	\$5,084	33
2003	51003559	CIS Assessment/Design & Implementation	MISC		\$1,100,029		\$36,300,965	\$34,640,205	5	Entire System	3.11%	\$1,076,739	15	\$34,193	33
2003	51003560	Automatic Hardware & Software	MISC		\$172,902		\$864,510	\$864,510	2	Western Suburbs	8.09%	\$26,972	15	\$5,374	5
2003	51003563	Various Engineering Prof. Services	MISC		\$23,693		\$781,857	\$781,857	6	Undetermined/Unqualified	0.00%	\$0	15	\$0	33
2004	51004416	Pump & Motor Impellers - Various Stations	PSMS		\$14,367		\$359,179	\$359,179	5	Entire System	3.11%	\$11,165	14	\$447	25
2004	51004417	Electrical Power Reliability	PSES		\$562,615		\$24,192,454	\$24,192,454	5	Entire System	3.11%	\$751,986	14	\$17,488	43
2004	51004420	General Engineering Services	MISC		\$112,254		\$3,704,381	\$3,704,381	6	Undetermined/Unqualified	0.00%	\$0	14	\$0	33
2004	51004427	Harvard Yards Building Improvements	PSG		\$46,257		\$1,387,713	\$1,387,713	5	Entire System	3.11%	\$43,135	14	\$1,438	30
2004	51004428	Water Tank Valves	TPG		\$6,728		\$168,196	\$168,196	5	Entire System	3.11%	\$5,228	14	\$209	25
2004	51004520	Monitoring Capital Projects	MISC		\$39,688		\$1,309,710	\$1,217,335	5	Entire System	3.11%	\$37,639	14	\$1,234	33
2004	51004571	Network Back-Up at 205 St. Clair	CHS		\$192,060		\$960,300	\$960,300	5	Entire System	3.11%	\$29,849	14	\$5,970	5
2004	51004572	Switchgear & Motor Control Repairs	POE		\$20,447		\$470,289	\$470,289	5	Entire System	3.11%	\$14,618	14	\$636	23
2004	51004580	Biological Testing Equipment	POE		\$2,383		\$54,820	\$54,820	5	Entire System	3.11%	\$1,704	14	\$74	23
2004	51004587	Chemical Feeder Process Improvements	TPCS		\$9,302		\$139,537	\$139,537	6	Undetermined/Unqualified	0.00%	\$0	14	\$0	15
2005	51005435	Crown Water Works Plant	TPC		\$3,828		\$133,964	\$133,964	2	Western Suburbs	8.09%	\$10,844	13	\$310	35
2005	51005440	Morgan Filter Rehab Construction	TPG		\$749,295		\$26,225,323	\$26,225,323	10	Western City and Suburbs	4.77%	\$1,251,018	13	\$35,743	35
2005	51005443	Morgan Pump Station Demolition	MI		\$57,580		\$1,727,411	\$1,727,411	10	Western City and Suburbs	4.77%	\$82,402	13	\$2,747	30
2005		Meter Automation AMR - Old - Large Meter Right Sizing	PS		\$2,686,130		\$94,014,547	\$46,614,132	5	Entire System	3.11%	\$1,448,931	13	\$83,494	35
2006	51006452	Morgan East Reservoir	SO	5229	\$1,304,307		\$39,129,223	\$39,129,223	10	Western City and Suburbs	4.77%	\$1,866,568	12	\$62,219	30
2006	51006452	Morgan East Reservoir	SO	5240	\$0		\$0	\$0	10	Western City and Suburbs	4.77%	\$0	12	\$0	30
2006	51006459	Renovations 1201 Lakeside	BLD	52001	\$45,556		\$2,050,000	\$1,503,054	5	Entire System	3.11%	\$46,720	12	\$1,416	45
2006	51006460	Warehouses Improvements Ph I & II	BLD	52001	\$239,450		\$10,775,663	\$10,563,011	5	Entire System	3.11%	\$328,335	12	\$7,443	45
2006	51006461	General Engineering Services	MISC	52001	\$87,537		\$2,888,735	\$2,888,735	6	Undetermined/Unqualified	0.00%	\$0	12	\$0	33
2007	51007465	Raw Water Monitoring System	SO	52001	\$5,941		\$178,237	\$178,237	6	Undetermined/Unqualified	0.00%	\$0	11	\$0	30
2007	51007466	Crown Water Plant	TPG	52229	\$702,269		\$24,579,400	\$13,128,815	10	Western City and Suburbs	4.77%	\$626,279	11	\$33,500	35
2007	51007478	Morgan Pretreatment and Residuals	TPG	52235	\$1,165,879		\$40,805,768	\$39,857,013	10	Western City and Suburbs	4.77%	\$1,901,285	11	\$55,616	35
2007	51007478	Morgan Pretreatment and Residuals	TPG	52412	\$0		\$0	\$0	10	Western City and Suburbs	4.77%	\$0	11	\$0	35
2007	51007481	Trunk Main Renewal Program	TM	52001	\$28,571		\$2,000,000	\$0	6	Undetermined/Unqualified	0.00%	\$0	11	\$0	70
2007	51007482	Facilities Improvements	BLD	52001	\$5,556		\$250,000	\$0	6	Undetermined/Unqualified	0.00%	\$0	11	\$0	45
2008	51008483	Replace & rehab cranes @ Water Plants & P.S.	POE	52001	\$5,205		\$119,715	\$119,715	5	Entire System	3.11%	\$3,721	10	\$162	23
2008	51008489	GIS Build-Out @ 205 St. Clair	CHS	52001	\$48,137		\$240,685	\$240,685	5	Entire System	3.11%	\$7,481	10	\$1,496	5
2008	51008490	Water Tank Rehabilitation	PSDS	52001	\$144,531		\$7,226,554	\$6,967,774	5	Entire System	3.11%	\$216,583	10	\$4,493	50
2008	51008490	Water Tank Rehabilitation	PSDS	52229	\$0		\$0	\$0	5	Entire System	3.11%	\$0	10	\$0	50
2008	51008491	Roof Rehabilitation and Replacement at Non-Plant Facilities	BLD	52001	\$22,612		\$1,017,545	\$1,017,545	5	Entire System	3.11%	\$31,629	10	\$703	45
2008	51008497	General Engineering Services - Phase V	MISC	52001	\$104,623		\$3,452,545	\$3,245,564	6	Undetermined/Unqualified	0.00%	\$0	10	\$0	33
2008	51008603	Replacement of Turbidimeters	TPG	52001	\$864		\$30,240	\$30,240	5	Entire System	3.11%	\$940	10	\$27	35
2008	51008605	Payment Remittance Processing	MISC	52001	\$13,636		\$450,000	\$414,034	5	Entire System	3.11%	\$12,870	10	\$424	33
2008	51008606	Gas Chromatograph & Appertenances	TPCS	52001	\$4,134		\$62,011	\$62,011	5	Entire System	3.11%	\$1,928	10	\$129	15
2008	51008607	Replacement of Large Submersible Pumps at Various Station	PSG	52001	\$1,333		\$40,000	\$40,000	6	Undetermined/Unqualified	0.00%	\$0	10	\$0	30
2008	51008608	Replacement of Large Valve Actuators for Independence S	PSG	52001	\$1,767		\$53,000	\$47,625	5	Entire System	3.11%	\$1,480	10	\$55	30
2009	51009102	Property Acquisition @ 4204 Harvard Ave.	NA	52001	\$0		\$68,000	\$68,000	5	Entire System	3.11%	\$21,114	9	\$0	NA
2009	51009106	Morgan Chemical Facility	TPCS	52229	\$1,168,094		\$17,521,405	\$17,078,064	10	Western City and Suburbs	4.77%	\$814,669	9	\$55,721	15
2009	51009106	Morgan Chemical Facility	TPCS	52235	\$0		\$0	\$0	10	Western City and Suburbs	4.77%	\$0	9	\$0	15
2009	51009107	Energy Management	PSES	52001	\$46,512		\$2,000,000	\$0	6	Undetermined/Unqualified	0.00%	\$0	9	\$0	43
2009	51009110	Harvard Yards Facility Modifications	PSG	52001	\$28,910		\$867,315	\$663,096	5	Entire System	3.11%	\$20,611	9	\$899	30
2010	w10113	Transmission Main Renewal Program	TM	52235	\$114,286		\$8,000,000	\$1,951,964	5	Entire					

Appendix B

Table 4
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Network Miles-Based Valuation

Year	Project Number	Description	Cost Indices		Original Cost	Accum. Depreciation	Original Cost Less Depreciation	RCNLD Valuation		
			Current Date Value	Purchase Date Value				Replacement Cost New	Indexed Accum. Deprec.	Replacement Cost New Less Depreciation
1996	51096230	Harvard Avenue Bridge Water Main	9,308	5,620	\$5,165	\$1,623	\$3,541	\$8,554	\$2,688	\$5,865
1996	51096232	Water Tank Inspection Program	9,308	5,620	\$4,356	\$3,195	\$1,162	\$7,215	\$5,291	\$1,924
1996	51096233	Parma Reservoir Rehab	9,308	5,620	\$670,845	\$217,038	\$453,807	\$1,111,072	\$359,464	\$751,607
1996	51096236	1996/1997 Trunk Main Cleaning & Lining	9,308	5,620	\$88,643	\$27,859	\$60,783	\$146,812	\$46,141	\$100,671
1996	51096242	Demolish Various Non-Operative Stations	9,308	5,620	\$0	\$0	\$0	\$0	\$0	\$0
1996	51096247	City-Wide GIS	9,308	5,620	\$1,103,772	\$1,103,772	\$0	\$1,828,098	\$1,828,098	\$0
1997	51097254	Hand Held Meter Reading System	9,308	5,825	\$57,899	\$34,740	\$23,160	\$92,520	\$55,512	\$37,008
1997	51097255	Distribution System Hydraulic Model	9,308	5,825	\$154,527	\$46,358	\$108,169	\$246,025	\$74,077	\$172,947
1997	51097264	PEP Phase I - Design	9,308	5,825	\$2,203,773	\$1,322,264	\$881,509	\$3,521,496	\$2,112,898	\$1,408,599
1998	51098276	Cost of Issuance - Series I Bonds	9,308	5,920	\$24,516	\$10,896	\$13,620	\$38,547	\$17,132	\$21,415
1998	51098277	Tower Painting and Maintenance	9,308	5,920	\$389,284	\$259,523	\$129,761	\$612,070	\$408,047	\$204,023
1998	51098278	Trunk Main Cleaning & Lining - Area 98-12	9,308	5,920	\$48,281	\$13,794	\$34,486	\$75,911	\$21,689	\$54,222
1999	51099281	Brookpark Water Main Relocation	9,308	6,060	\$20,588	\$5,588	\$15,000	\$31,622	\$8,583	\$23,039
1999	51099282	Chlorine Gas Cylinder Handling	9,308	6,060	\$9,206	\$9,206	\$0	\$14,140	\$14,140	\$0
1999	51099287	Replace Water Pump Impellers	9,308	6,060	\$0	\$0	\$0	\$0	\$0	\$0
1999	51099288	Repair Ball Valve for Pump	9,308	6,060	\$0	\$0	\$0	\$0	\$0	\$0
2000	51000302	Denison Ave. Bridge - 12" & 30" Water Mains	9,308	6,221	\$13,357	\$3,435	\$9,922	\$19,985	\$5,139	\$14,846
2000	51000310	Morgan Pump Station	9,308	6,221	\$2,233,615	\$1,340,169	\$893,446	\$3,341,985	\$2,005,191	\$1,336,794
2001	51001336	Water Main Specials	9,308	6,342	\$130,673	\$31,735	\$98,938	\$191,785	\$46,576	\$145,209
2001	51001341	Repair Hagen Road Hwy Sluice Gate	9,308	6,342	\$7,814	\$3,795	\$4,019	\$11,468	\$5,570	\$5,898
2001	51001343	Repair of Crown Sludge Dome	9,308	6,342	\$7,407	\$3,598	\$3,809	\$10,871	\$5,280	\$5,591
2001	51001345	Engineering/Environmental Consulting	9,308	6,342	\$0	\$0	\$0	\$0	\$0	\$0
2001	51001353	Crown Residuals Press Rehab	9,308	6,342	\$104,262	\$50,642	\$53,621	\$153,023	\$74,326	\$78,698
2001	51001501	Equipment for Distribution Mains	9,308	6,342	\$8,486	\$2,061	\$6,425	\$12,454	\$3,025	\$9,430
2001	51001503	Spectrometer and Accessories	9,308	6,342	\$2,726	\$2,015	\$711	\$4,001	\$2,958	\$1,044
2001	51001504	Distribution System Instruments	9,308	6,342	\$22,248	\$1,661	\$596	\$3,239	\$2,438	\$861
2001	51001518	Installation & Testing LAN	9,308	6,342	\$24,424	\$24,424	\$0	\$35,847	\$35,847	\$0
2001	51001520	Configuring, Monitoring, Troubleshooting	9,308	6,342	\$11,377	\$5,861	\$5,516	\$16,698	\$8,602	\$8,096
2001	51001522	Require K, Repair/Replacement SCADA	9,308	6,342	\$38,689	\$26,309	\$12,381	\$56,783	\$38,613	\$18,171
2002	51002364	Security Contracts Professional Services	9,308	6,538	\$1,002,595	\$486,107	\$516,489	\$1,427,372	\$692,059	\$735,313
2002	51002366	Water Tank Inspection Cycle E	9,308	6,538	\$0	\$0	\$0	\$0	\$0	\$0
2002	51002372	General Engineering Services	9,308	6,538	\$0	\$0	\$0	\$0	\$0	\$0
2002	51002376	Repair Repair and Replacement	9,308	6,538	\$139,652	\$49,654	\$89,998	\$198,819	\$70,691	\$128,128
2002	51002380	PEP Program Management Phase II	9,308	6,538	\$946,572	\$458,944	\$487,628	\$1,347,613	\$653,388	\$694,225
2002	51002530	Financial Information Budget Software	9,308	6,538	\$23,336	\$11,314	\$12,022	\$33,223	\$16,108	\$17,115
2002	51002531	Electronic Document Management System	9,308	6,538	\$31,190	\$15,122	\$16,067	\$44,404	\$21,529	\$22,875
2002	51002532	Work Management System	9,308	6,538	\$167,760	\$81,338	\$86,422	\$238,836	\$115,799	\$123,036
2003	51003559	CIS Assessment/Design & Implementation	9,308	6,694	\$1,076,739	\$489,427	\$587,312	\$1,497,205	\$680,548	\$816,657
2003	51003560	Automatic Hardware & Software	9,308	6,694	\$26,872	\$0	\$26,872	\$37,365	\$37,365	\$0
2003	51003563	Various Engineering Prof. Services	9,308	6,694	\$0	\$0	\$0	\$0	\$0	\$0
2004	51004416	Pump & Motor Impellers - Various Stations	9,308	7,115	\$11,165	\$6,252	\$4,912	\$14,606	\$8,179	\$6,427
2004	51004417	Electrical Power Reliability	9,308	7,115	\$751,986	\$244,833	\$507,154	\$983,765	\$320,296	\$663,470
2004	51004420	General Engineering Services	9,308	7,115	\$0	\$0	\$0	\$0	\$0	\$0
2004	51004427	Harvard Yards Building Improvements	9,308	7,115	\$43,135	\$20,130	\$23,005	\$56,430	\$26,334	\$30,096
2004	51004428	Water Tank Valve	9,308	7,115	\$2,928	\$2,928	\$0	\$6,840	\$3,009	\$3,831
2004	51004570	Monitoring Capital Projects	9,308	7,115	\$37,839	\$16,053	\$21,786	\$49,502	\$21,001	\$28,501
2004	51004571	Network Back-Up at 205 St. Clair	9,308	7,115	\$29,849	\$29,849	\$0	\$39,050	\$39,050	\$0
2004	51004572	Switchgear & Motor Control Repairs	9,308	7,115	\$14,618	\$8,898	\$5,720	\$19,124	\$11,641	\$7,483
2004	51004580	Biological Testing Equipment	9,308	7,115	\$1,704	\$1,037	\$667	\$2,229	\$1,357	\$872
2004	51004587	Chemical Feeder Process Improvements	9,308	7,115	\$0	\$0	\$0	\$0	\$0	\$0
2005	51005435	Crown Water Works Plant	9,308	7,446	\$10,848	\$4,028	\$6,816	\$13,556	\$5,045	\$8,511
2005	51005440	Morgan Filter Rehab Construction	9,308	7,446	\$1,251,018	\$464,664	\$786,354	\$1,563,856	\$580,861	\$982,995
2005	51005443	Morgan Pump Station Demolition	9,308	7,446	\$82,402	\$35,708	\$46,695	\$103,008	\$44,637	\$58,371
2005	51005447	Meter Automation AMR - Old - Large Meter Right Sizing	9,308	7,446	\$1,448,931	\$538,174	\$910,757	\$1,811,261	\$672,754	\$1,138,507
2006	51006452	Morgan East Reservoir	9,308	7,749	\$1,866,568	\$746,627	\$1,119,941	\$2,241,992	\$896,797	\$1,345,195
2006	51006452	Morgan East Reservoir	9,308	7,749	\$0	\$0	\$0	\$0	\$0	\$0
2006	51006459	Renovations 1201 Lakeside	9,308	7,749	\$46,726	\$12,459	\$34,261	\$56,117	\$14,965	\$41,153
2006	51006460	Housekeeping Operations Ph I & II	9,308	7,749	\$328,335	\$87,556	\$240,779	\$394,374	\$105,166	\$289,207
2006	51006461	General Engineering Services	9,308	7,749	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007465	Raw Water Monitoring System	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007466	Crown Water Plant	9,308	7,971	\$626,279	\$196,831	\$429,449	\$731,371	\$229,859	\$501,512
2007	51007478	Morgan Pretreatment and Residuals	9,308	7,971	\$1,901,285	\$597,547	\$1,303,738	\$2,220,327	\$697,817	\$1,522,510
2007	51007478	Morgan Pretreatment and Residuals	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007481	Trunk Main Renewal Program	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2007	51007482	Facilities Improvements	9,308	7,971	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008483	Replace & rehab cranes @ Water Plants & P.S.	9,308	8,311	\$3,721	\$1,618	\$2,103	\$4,167	\$1,812	\$2,356
2008	51008489	GIS Build-Out @ 205 St. Clair	9,308	8,311	\$7,481	\$7,481	\$0	\$8,379	\$8,379	\$0
2008	51008490	Water Tank Rehabilitation	9,308	8,311	\$216,583	\$43,317	\$173,266	\$242,560	\$48,512	\$194,048
2008	51008490	Water Tank Rehabilitation	9,308	8,311	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008491	Roof Rehabilitation and Replacement at Non-Plant Facilities	9,308	8,311	\$31,629	\$7,029	\$24,600	\$35,423	\$7,872	\$27,551
2008	51008497	General Engineering Services - Phase V	9,308	8,311	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008603	Replacement of Turbidimeters	9,308	8,311	\$940	\$269	\$671	\$1,053	\$301	\$752
2008	51008605	Payment Remittance Processing	9,308	8,311	\$12,870	\$3,900	\$8,970	\$14,413	\$4,368	\$10,046
2008	51008606	Gas Chromatograph & Appertenances	9,308	8,311	\$1,928	\$1,285	\$643	\$2,159	\$1,439	\$720
2008	51008607	Replacement of Large Submersible Pumps at Various Sites	9,308	8,311	\$0	\$0	\$0	\$0	\$0	\$0
2008	51008608	Replacement of Large Valve Actuators for Independence S	9,308	8,311	\$1,490	\$493	\$997	\$1,658	\$553	\$1,105
2009	51009102	Property Acquisition @ 4204 Harvard Ave.	9,308	8,570	\$2,114	\$0	\$2,114	\$2,296	\$0	\$2,296
2009	51009106	Morgan Chemical Facility	9,308	8,570	\$814,669	\$488,801	\$325,868	\$884,810	\$530,886	\$353,924
2009	51009106	Morgan Chemical Facility	9,308	8,570	\$0	\$0	\$0	\$0	\$0	\$0
2009	51009107	Energy Management	9,308	8,570	\$0	\$0	\$0	\$0	\$0	\$0
2009	51009110	Harvard Yards Facility Modifications	9,308	8,570	\$20,611	\$6,183	\$14,428	\$22,386	\$6,716	\$15,670
2010	w10113	Transmission Main Renewal Program	9,308	8,802	\$60,674	\$6,934	\$53,740	\$64,159	\$7,332	\$56,827
2010	w10116	General Engineering Services Ph. VI	9,308	8,802	\$0	\$0	\$0	\$0	\$0	\$0
2010	w10119	Security Upgrades & Improvements	9,308	8,802	\$8,647	\$2,096	\$6,551	\$9,144	\$2,217	\$6,927
2010	w10613	Security/CNL Project	9,308	8,802	\$1,243	\$301	\$942	\$1,315	\$319	\$996
2010	w10616	GIS SAN	9,308	8,802	\$5,151	\$5,151	\$0	\$5,447	\$5,447	\$0
2011	w11125	Morgan Raw Water Pump Station Improvements	9,308	9,070	\$257,919	\$60,181	\$197,738	\$264,692	\$61,762	\$202,931
2011	w11125	Morgan Raw Water Pump Station Improvements	9,308	9,070	\$0	\$0	\$0	\$0	\$0	\$0
2011	w11132	1825 Lakeside Avenue Improvements	9,308	9,070	\$4,171	\$649	\$3,523	\$4,281	\$666	\$3,615
2011	w11619	Purchase of Laboratory Equipment	9,308	9,070	\$0	\$0	\$0	\$0	\$0	\$0
2012	w12139	General Engineering Services VII	9,308	9,308	\$0	\$0	\$0	\$0	\$0	\$0
2012	w12141	Control Systems Rehab	9,308	9,308	\$3,891	\$934	\$2,957	\$3,891	\$934	\$2,957
2012	w12146	800 Mhz Radio	9,308	9,308	\$87,653	\$22,866	\$64,787	\$87,653	\$22,866	\$64,787
2012	w12147	800 Mhz Radio "A"	9,308	9,308	\$101,270	\$26,418	\$74,852	\$101,270	\$26,418	\$74,852
2012	w12620	Distribution and Maintenance Equipment	9,308	9,308	\$711	\$185	\$526	\$711	\$185	\$526
2012	w12621	Computer Hardware 2012	9,308	9,308	\$14,112	\$14,112	\$0	\$14,112	\$14,112	\$0
2012	w12622	Vehicles 2012	9,308	9,308	\$0	\$0	\$0	\$0	\$0	\$0
2012	w12624	Utility Vehicles (Gators)	9,308	9,308	\$0	\$0	\$0	\$0	\$0	\$0
2013	w13155	Secondary Station Improvements Cycle F	9,308	9,308	\$137,793	\$22,966	\$114,828	\$137,793	\$22,966	\$114,828
2013	w13627	Portable Potable Water Dispensing Trailer	9,308	9,308	\$1,371	\$685	\$685	\$1,371	\$685	\$685
2013	w13628	Computer Hardware & Software 2013	9,308	9,308	\$5,724	\$5,724	\$0	\$5,724	\$5,724	\$0

Appendix B

Table 5
Cleveland Water Department
Water System Asset Valuation - Westlake Stranded Cost Analysis
Asset Useful Lives

		Years				
Asset Type	Abbr.	Low	High	Reference	CWD Range	Median
Source of Supply						
Intake Structures/Tunnel	SIST	75	100	88	75-100	88
Reservoir	SR	35	100	68	35-100	68
Other	SO	10	50	30	10-50	30
Treatment Plant						
General	TPG	30	40	35	30-40	35
Chemical Systems	TPCS	10	20	15	10-20	15
Distribution Lines						
Trunk Main	TM	40	100	70	40-100	70
Distribution Main	DM	40	100	70	40-100	70
City (lateral) connections	LC	20	50	35	20-50	35
Valves	VL	20	30	25	20-30	25
Other	DO	40	100	70	40-100	70
Pipeline Appurtenances						
Hydrants	H	20	30	25	20-30	25
Meters	M	30	40	35	30-40	35
Pump Stations						
General	PSG	10	50	30	10-50	30
Electrical Systems	PSES	25	60	43	25-60	43
Mechanical Systems	PSMS	10	40	25	10-40	25
Distribution Storage	PSDS	40	60	50	40-60	50
Tower Painting	PSPT	20	40	30	20-40	30
Other						
Water Storage Facilities	WS	40	100	70	40-100	70
Roadways	R	25	25	25	25	25
Landscaping	L	15	15	15	15	15
Power Operated Equipment	POE	10	35	23	10-35	23
Vehicles	V	7	12	10	7-12	10
Computer Hardware and Software	CHS	5	5	5	5	5
Buildings & Expansions	BLD	30	60	45	30-60	45
Miscellaneous	MISC	5	60	33	5-60	33
Parking Garage	PKG	20	40	30	20-40	30
SCADA and Other Electronics	ELEC	20	30	25	20-30	25

Appendix C

Stranded Operating Cost Calculation Details

*Table 1 - O&M Forecast by Section
and Category for Stranded Costs
Analysis*

*Table 2 - Projected Change in Budget
Category*

*Table 3 - O&M Budget Category
Adjustment for Variable Costs for
Stranded Costs Analysis*

*Table 4 - O&M Budget Variable Cost
Projection by Section*

*Table 5 - O&M Section Fixed Costs
for Stranded Cost Analysis*

*Table 6 - O&M Section Stranded
Costs Allocated to Low/1st High*

Table 7 - Total Water Demand

Forecast - Billable Water (MCFs)

*Table 8 - Westlake Water Demand
(MCFs)*

*Table 9 - Water Demand - Proportion
for Westlake (MCFs)*

*Table 10 - Stranded O&M Costs -
Westlake*

Appendix C

Table 1
Cleveland Water District
Westlake Analysis
O&M Forecast by Section and Category for Stranded Costs Analysis

Section	2011	2012	2013	2014	2015	2016	2017	2018	2019
Customer Account Services									
Salaries and Wages	7,575,537	8,263,849	8,429,196	8,597,752	8,769,657	8,945,048	9,123,947	9,306,424	9,492,550
Employee Benefits	3,072,059	3,514,064	3,638,299	3,677,616	3,807,131	3,910,402	4,016,475	4,125,425	4,237,330
Training & Professional Dues	0	170	170	170	170	170	170	170	170
Utilities	0	15,027	15,919	16,812	17,705	18,699	19,750	20,859	22,031
Contractual Services	2,525,403	3,901,654	4,007,196	4,112,739	4,218,282	4,329,436	4,443,519	4,560,609	4,680,783
Materials & Supplies	73,950	70,524	73,885	77,247	80,608	84,280	88,120	92,135	96,332
Maintenance	307,802	337,929	347,084	356,210	365,364	374,996	384,881	395,027	405,441
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	372,093	343,824	353,131	362,438	371,700	381,486	391,529	401,837	412,416
Plant Operations									
Salaries and Wages	8,763,733	8,748,864	8,923,915	9,102,364	9,284,358	9,470,043	9,659,441	9,852,628	10,049,678
Employee Benefits	3,643,253	3,356,395	3,475,056	3,512,608	3,636,313	3,734,950	3,836,264	3,940,325	4,047,209
Training & Professional Dues	9,472	15,312	15,312	15,312	15,312	15,312	15,312	15,312	15,312
Utilities	18,611,372	18,817,556	19,934,724	21,052,659	22,170,595	23,416,213	24,731,814	26,121,330	27,588,914
Contractual Services	1,627,883	1,078,457	1,107,630	1,136,803	1,165,976	1,196,700	1,228,234	1,260,599	1,293,816
Materials & Supplies	6,778,605	8,460,337	8,863,590	9,266,843	9,670,096	10,110,650	10,571,275	11,052,885	11,556,436
Maintenance	1,639,978	1,283,598	1,318,370	1,353,036	1,387,808	1,424,392	1,461,941	1,500,480	1,540,034
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	289,609	251,213	258,013	264,813	271,580	278,730	286,068	293,600	301,329
Budget and Finance									
Salaries and Wages	1,531,685	1,624,905	1,657,417	1,690,560	1,724,361	1,758,848	1,794,025	1,829,905	1,866,503
Employee Benefits	614,232	602,561	623,863	630,605	652,813	670,521	688,709	707,391	726,580
Training & Professional Dues	4,223	12,455	12,455	12,455	12,455	12,455	12,455	12,455	12,455
Utilities	0	0	0	0	0	0	0	0	0
Contractual Services	6,071	3,373	3,464	3,555	3,647	3,743	3,841	3,942	4,046
Materials & Supplies	158,061	152,528	159,798	167,068	174,338	182,281	190,585	199,268	208,347
Maintenance	3,023	5,607	5,758	5,910	6,062	6,222	6,386	6,554	6,727
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	15,818	18,973	19,487	20,000	20,511	21,051	21,606	22,174	22,758
Information Technology									
Salaries and Wages	3,514,992	3,174,687	3,238,208	3,302,961	3,369,001	3,436,380	3,505,107	3,575,208	3,646,711
Employee Benefits	1,176,119	1,037,940	1,074,635	1,086,248	1,124,503	1,155,006	1,186,336	1,218,516	1,251,569
Training & Professional Dues	5,253	18,383	18,383	18,383	18,383	18,383	18,383	18,383	18,383
Utilities	1,322,543	1,239,554	1,313,144	1,386,785	1,460,426	1,542,478	1,629,139	1,720,670	1,817,343
Contractual Services	3,082,214	2,977,656	3,058,204	3,138,753	3,219,301	3,304,131	3,391,197	3,480,556	3,572,271
Materials & Supplies	70,320	107,395	112,513	117,632	122,751	128,344	134,191	140,304	146,696
Maintenance	1,898,326	1,961,578	2,014,716	2,067,692	2,120,830	2,176,738	2,234,119	2,293,013	2,353,460
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	886,450	978,639	1,005,131	1,031,623	1,057,985	1,085,838	1,114,425	1,143,765	1,173,876
Distribution and Maintenance									
Salaries and Wages	20,944,749	20,910,603	21,328,992	21,755,501	22,190,484	22,634,288	23,086,969	23,548,703	24,019,671
Employee Benefits	8,544,565	8,176,193	8,465,250	8,556,728	8,858,073	9,098,355	9,345,154	9,598,648	9,859,018
Training & Professional Dues	6,980	8,014	8,014	8,014	8,014	8,014	8,014	8,014	8,014
Utilities	416,216	368,643	390,528	412,429	434,330	458,732	484,505	511,726	540,477
Contractual Services	686,771	419,888	431,247	442,605	453,963	465,925	478,203	490,804	503,737
Materials & Supplies	2,312,149	2,388,190	2,502,021	2,615,851	2,729,682	2,854,042	2,984,067	3,120,017	3,262,160
Maintenance	2,324,830	1,920,388	1,972,410	2,024,274	2,076,296	2,131,030	2,187,206	2,244,863	2,304,041
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	3,710,995	3,502,425	3,597,235	3,692,045	3,786,392	3,886,076	3,988,384	4,093,386	4,201,152
Admin/Water Management									

Appendix C

Table 1
Cleveland Water District
Westlake Analysis
O&M Forecast by Section and Category for Stranded Costs Analysis

Section	2011	2012	2013	2014	2015	2016	2017	2018	2019
Salaries and Wages	6,878,405	7,817,424	7,973,839	8,133,289	8,295,907	8,461,824	8,631,058	8,803,677	8,979,749
Employee Benefits	2,519,059	2,718,774	2,814,893	2,845,311	2,945,515	3,025,415	3,107,481	3,191,774	3,278,353
Training & Professional Dues	100,250	136,545	136,545	136,545	136,545	136,545	136,545	136,545	136,545
Utilities	782,558	152,785	161,855	170,932	180,009	190,122	200,804	212,086	224,002
Contractual Services	1,817,759	2,343,131	2,406,514	2,469,898	2,533,281	2,600,035	2,668,547	2,738,865	2,811,035
Materials & Supplies	1,008,040	1,216,673	1,274,664	1,332,656	1,390,647	1,454,003	1,520,245	1,589,505	1,661,920
Maintenance	614,128	589,509	605,479	621,400	637,369	654,171	671,416	689,115	707,281
Claims Refunds Misc	3,048,811	3,121,572	3,205,772	3,290,999	3,375,200	3,464,242	3,555,634	3,649,436	3,745,714
Interdepartmental Service Charges	3,272,600	3,524,116	3,619,514	3,714,911	3,809,843	3,910,144	4,013,086	4,118,738	4,227,171
Engineering									
Salaries and Wages	5,227,046	4,763,724	4,859,038	4,956,203	5,055,298	5,156,403	5,259,530	5,364,719	5,472,012
Employee Benefits	1,903,452	1,813,379	1,877,489	1,897,777	1,964,612	2,017,903	2,072,640	2,128,862	2,186,609
Training & Professional Dues	3,312	2,774	2,774	2,774	2,774	2,774	2,774	2,774	2,774
Utilities	656,140	593,248	628,468	663,713	698,957	738,227	779,703	823,509	869,777
Contractual Services	71,435	28,908	29,690	30,472	31,254	32,078	32,923	33,791	34,681
Materials & Supplies	46,045	54,755	57,365	59,975	62,585	65,436	68,417	71,534	74,793
Maintenance	8,019,083	7,566,692	7,771,670	7,976,023	8,181,001	8,396,661	8,618,007	8,845,188	9,078,357
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	316,656	284,272	291,968	299,663	307,320	315,411	323,715	332,237	340,984
Total Operating Budget	144,812,109	146,797,633	151,491,902	155,695,642	160,465,378	165,351,784	170,414,273	175,660,264	181,097,531

1 - 2011 and 2012 from City of Cleveland Division of Water Actuals
2 - 2013 through 2015 projected from City of Cleveland Division of Water Comprehensive Financial Plan Report and Water Rate Study escalations, Final Report March 2011, p. 3-5

Appendix C

Table 1
Cleveland Water District
Westlake Analysis
O&M Forecast by Section and Category for Stranded Costs Analysis

Section	2020	2021	2022	2023	2024	2025	2026	2027	2028
Customer Account Services									
Salaries and Wages	9,682,399	9,876,044	10,073,563	10,275,032	10,480,530	10,690,138	10,903,938	11,122,014	11,344,452
Employee Benefits	4,352,270	4,470,329	4,591,590	4,716,140	4,844,068	4,975,467	5,110,430	5,249,054	5,391,439
Training & Professional Dues	170	170	170	170	170	170	170	170	170
Utilities	23,269	24,576	25,957	27,416	28,956	30,583	32,301	34,116	36,033
Contractual Services	4,804,124	4,930,716	5,060,643	5,193,993	5,330,858	5,471,329	5,615,501	5,763,473	5,915,344
Materials & Supplies	100,721	105,310	110,107	115,124	120,369	125,852	131,586	137,581	143,849
Maintenance	416,128	427,098	438,357	449,912	461,773	473,945	486,439	499,262	512,423
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	423,274	434,417	445,854	457,592	469,639	482,003	494,693	507,716	521,083
Plant Operations									
Salaries and Wages	10,250,669	10,455,680	10,664,792	10,878,085	11,095,644	11,317,554	11,543,903	11,774,778	12,010,271
Employee Benefits	4,156,993	4,269,754	4,385,574	4,504,536	4,626,725	4,752,228	4,881,135	5,013,540	5,149,535
Training & Professional Dues	15,312	15,312	15,312	15,312	15,312	15,312	15,312	15,312	15,312
Utilities	29,138,952	30,776,075	32,505,178	34,331,428	36,260,282	38,297,506	40,449,189	42,721,759	45,122,011
Contractual Services	1,327,909	1,362,900	1,398,813	1,435,673	1,473,503	1,512,331	1,552,182	1,593,083	1,635,061
Materials & Supplies	12,082,928	12,633,407	13,208,964	13,810,743	14,439,938	15,097,798	15,785,629	16,504,796	17,256,728
Maintenance	1,580,631	1,622,298	1,665,064	1,708,957	1,754,007	1,800,245	1,847,701	1,896,409	1,946,400
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	309,262	317,404	325,760	334,337	343,139	352,172	361,444	370,960	380,726
Budget and Finance									
Salaries and Wages	1,903,832	1,941,908	1,980,746	2,020,361	2,060,767	2,101,982	2,144,021	2,186,901	2,230,639
Employee Benefits	746,289	766,532	787,325	808,682	830,618	853,149	876,291	900,061	924,476
Training & Professional Dues	12,455	12,455	12,455	12,455	12,455	12,455	12,455	12,455	12,455
Utilities	0	0	0	0	0	0	0	0	0
Contractual Services	4,153	4,262	4,375	4,490	4,608	4,730	4,854	4,982	5,114
Materials & Supplies	217,838	227,763	238,139	248,989	260,332	272,192	284,593	297,559	311,115
Maintenance	6,904	7,086	7,273	7,464	7,661	7,863	8,071	8,283	8,502
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	23,357	23,972	24,603	25,251	25,916	26,598	27,298	28,017	28,755
Information Technology									
Salaries and Wages	3,719,645	3,794,037	3,869,917	3,947,314	4,026,259	4,106,784	4,188,918	4,272,696	4,358,149
Employee Benefits	1,285,519	1,320,390	1,356,206	1,392,994	1,430,780	1,469,591	1,509,455	1,550,400	1,592,456
Training & Professional Dues	18,383	18,383	18,383	18,383	18,383	18,383	18,383	18,383	18,383
Utilities	1,919,447	2,027,288	2,141,188	2,261,487	2,388,545	2,522,742	2,664,478	2,814,177	2,972,287
Contractual Services	3,666,402	3,763,014	3,862,171	3,963,942	4,068,394	4,175,598	4,285,628	4,398,556	4,514,460
Materials & Supplies	153,379	160,367	167,673	175,312	183,299	191,650	200,381	209,510	219,055
Maintenance	2,415,500	2,479,175	2,544,529	2,611,606	2,680,450	2,751,110	2,823,633	2,898,067	2,974,463
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	1,204,781	1,236,499	1,269,052	1,302,462	1,336,752	1,371,944	1,408,063	1,445,133	1,483,179
Distribution and Maintenance									
Salaries and Wages	24,500,059	24,990,054	25,489,849	25,999,640	26,519,627	27,050,013	27,591,007	28,142,821	28,705,670
Employee Benefits	10,126,451	10,401,138	10,683,276	10,973,068	11,270,720	11,576,447	11,890,466	12,213,003	12,544,290
Training & Professional Dues	8,014	8,014	8,014	8,014	8,014	8,014	8,014	8,014	8,014
Utilities	570,842	602,914	636,788	672,565	710,352	750,262	792,414	836,934	883,956
Contractual Services	517,010	530,634	544,616	558,967	573,696	588,814	604,329	620,254	636,598
Materials & Supplies	3,410,778	3,566,168	3,728,636	3,898,507	4,076,117	4,261,818	4,455,979	4,658,986	4,871,242
Maintenance	2,364,778	2,427,116	2,491,098	2,556,766	2,624,165	2,693,341	2,764,341	2,837,212	2,912,004
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	4,311,755	4,425,270	4,541,773	4,661,344	4,784,062	4,910,012	5,039,277	5,171,945	5,308,106
Admin/Water Management									

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Table 1
Cleveland Water District
Westlake Analysis
O&M Forecast by Section and Category for Stranded Costs Analysis

Section	2020	2021	2022	2023	2024	2025	2026	2027	2028
Salaries and Wages	9,159,342	9,342,526	9,529,375	9,719,960	9,914,357	10,112,641	10,314,892	10,521,187	10,731,608
Employee Benefits	3,367,280	3,458,620	3,552,438	3,648,800	3,747,777	3,849,438	3,953,856	4,061,108	4,171,268
Training & Professional Dues	136,545	136,545	136,545	136,545	136,545	136,545	136,545	136,545	136,545
Utilities	236,587	249,879	263,918	278,746	294,407	310,947	328,417	346,869	366,357
Contractual Services	2,885,108	2,961,132	3,039,159	3,119,243	3,201,437	3,285,796	3,372,379	3,461,243	3,552,448
Materials & Supplies	1,737,634	1,816,798	1,899,568	1,986,110	2,076,593	2,171,200	2,270,116	2,373,539	2,481,673
Maintenance	725,926	745,062	764,702	784,861	805,551	826,786	848,581	870,951	893,910
Claims Refunds Misc	3,844,531	3,945,955	4,050,055	4,156,901	4,266,566	4,379,124	4,494,651	4,613,227	4,734,930
Interdepartmental Service Charges	4,338,459	4,452,677	4,569,902	4,690,213	4,813,692	4,940,421	5,070,487	5,203,977	5,340,981
Engineering									
Salaries and Wages	5,581,451	5,693,079	5,806,939	5,923,076	6,041,537	6,162,366	6,285,612	6,411,322	6,539,547
Employee Benefits	2,245,923	2,306,845	2,369,420	2,433,692	2,499,707	2,567,514	2,637,159	2,708,694	2,782,170
Training & Professional Dues	2,774	2,774	2,774	2,774	2,774	2,774	2,774	2,774	2,774
Utilities	918,644	970,256	1,024,768	1,082,343	1,143,153	1,207,379	1,275,214	1,346,859	1,422,530
Contractual Services	35,595	36,533	37,496	38,484	39,498	40,539	41,607	42,703	43,828
Materials & Supplies	78,201	81,764	85,489	89,383	93,456	97,713	102,165	106,819	111,686
Maintenance	9,317,673	9,563,297	9,815,397	10,074,142	10,339,708	10,612,275	10,892,026	11,179,153	11,473,848
Claims Refunds Misc	0	0	0	0	0	0	0	0	0
Interdepartmental Service Charges	349,961	359,175	368,630	378,335	388,296	398,518	409,010	419,778	430,829
Total Operating Budget	186,734,216	192,578,847	198,640,360	204,928,119	211,451,937	218,222,101	225,249,393	232,545,120	240,121,137

1 - 2011 and 2012 from City of Cleveland Division of Water Actuals
2 - 2013 through 2015 projected from City of Cleveland Division of
Water Comprehensive Financial Plan Report and Water Rate
Study escalations, Final Report March 2011, p. 3-5

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Table 1
Cleveland Water District
Westlake Analysis
O&M Forecast by Section and Category for Stranded Costs Analysis

Section	2029	2030	2031	2032	2033
Customer Account Services					
Salaries and Wages	11,571,338	11,802,762	12,038,815	12,279,588	12,525,177
Employee Benefits	5,537,685	5,687,899	5,842,187	6,000,661	6,163,433
Training & Professional Dues	170	170	170	170	170
Utilities	38,057	40,195	42,453	44,839	47,358
Contractual Services	6,071,216	6,231,196	6,395,391	6,563,914	6,736,876
Materials & Supplies	150,402	157,254	164,419	171,909	179,741
Maintenance	525,931	539,796	554,025	568,630	583,620
Claims Refunds Misc	0	0	0	0	0
Interdepartmental Service Charges	534,801	548,881	563,331	578,162	593,383
Plant Operations					
Salaries and Wages	12,250,473	12,495,480	12,745,386	13,000,291	13,260,294
Employee Benefits	5,289,220	5,432,694	5,580,060	5,731,423	5,886,892
Training & Professional Dues	15,312	15,312	15,312	15,312	15,312
Utilities	47,657,116	50,334,653	53,162,622	56,149,476	59,304,141
Contractual Services	1,678,146	1,722,366	1,767,751	1,814,332	1,862,141
Materials & Supplies	18,042,916	18,864,922	19,724,377	20,622,988	21,562,537
Maintenance	1,997,709	2,050,371	2,104,422	2,159,896	2,216,834
Claims Refunds Misc	0	0	0	0	0
Interdepartmental Service Charges	390,749	401,036	411,594	422,430	433,552
Budget and Finance					
Salaries and Wages	2,275,251	2,320,755	2,367,170	2,414,513	2,462,802
Employee Benefits	949,553	975,310	1,001,766	1,028,940	1,056,851
Training & Professional Dues	12,455	12,455	12,455	12,455	12,455
Utilities	0	0	0	0	0
Contractual Services	5,248	5,387	5,529	5,674	5,824
Materials & Supplies	325,289	340,108	355,603	371,804	388,743
Maintenance	8,726	8,956	9,192	9,434	9,683
Claims Refunds Misc	0	0	0	0	0
Interdepartmental Service Charges	29,512	30,289	31,086	31,905	32,744
Information Technology					
Salaries and Wages	4,445,311	4,534,216	4,624,899	4,717,396	4,811,743
Employee Benefits	1,635,652	1,680,020	1,725,592	1,772,400	1,820,478
Training & Professional Dues	18,383	18,383	18,383	18,383	18,383
Utilities	3,139,280	3,315,655	3,501,940	3,698,690	3,906,495
Contractual Services	4,633,419	4,755,512	4,880,822	5,009,435	5,141,436
Materials & Supplies	229,035	239,469	250,379	261,786	273,713
Maintenance	3,052,873	3,133,351	3,215,949	3,300,726	3,387,736
Claims Refunds Misc	0	0	0	0	0
Interdepartmental Service Charges	1,522,226	1,562,302	1,603,432	1,645,645	1,688,970
Distribution and Maintenance					
Salaries and Wages	29,279,777	29,865,366	30,462,666	31,071,912	31,693,343
Employee Benefits	12,884,562	13,234,065	13,593,049	13,961,770	14,340,493
Training & Professional Dues	8,014	8,014	8,014	8,014	8,014
Utilities	933,620	986,074	1,041,475	1,099,988	1,161,789
Contractual Services	653,372	670,589	688,259	706,395	725,009
Materials & Supplies	5,093,168	5,325,205	5,567,812	5,821,473	6,086,689
Maintenance	2,988,768	3,067,555	3,148,419	3,231,415	3,316,599
Claims Refunds Misc	0	0	0	0	0
Interdepartmental Service Charges	5,447,852	5,591,277	5,738,477	5,889,553	6,044,607
Admin/Water Management					

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Table 1
Cleveland Water District
Westlake Analysis
O&M Forecast by Section and Category for Stranded Costs Analysis

Section	2029	2030	2031	2032	2033
Salaries and Wages	10,946,238	11,165,160	11,388,461	11,616,227	11,848,549
Employee Benefits	4,284,417	4,400,634	4,520,005	4,642,613	4,768,547
Training & Professional Dues	136,545	136,545	136,545	136,545	136,545
Utilities	386,941	408,680	431,641	455,892	481,506
Contractual Services	3,646,057	3,742,133	3,840,740	3,941,946	4,045,818
Materials & Supplies	2,594,734	2,712,946	2,836,544	2,965,772	3,100,888
Maintenance	917,474	941,660	966,483	991,961	1,018,110
Claims Refunds Misc	4,859,844	4,988,054	5,119,646	5,254,709	5,393,336
Interdepartmental Service Charges	5,481,592	5,625,905	5,774,018	5,926,029	6,082,043
Engineering					
Salaries and Wages	6,670,337	6,803,742	6,939,815	7,078,610	7,220,180
Employee Benefits	2,857,638	2,935,153	3,014,771	3,096,549	3,180,545
Training & Professional Dues	2,774	2,774	2,774	2,774	2,774
Utilities	1,502,453	1,586,866	1,676,021	1,770,186	1,869,641
Contractual Services	44,983	46,169	47,385	48,634	49,915
Materials & Supplies	116,774	122,094	127,657	133,472	139,553
Maintenance	11,776,312	12,086,749	12,405,369	12,732,389	13,068,030
Claims Refunds Misc	0	0	0	0	0
Interdepartmental Service Charges	442,172	453,813	465,760	478,022	490,607
Total Operating Budget	247,989,876	256,164,378	264,658,321	273,486,059	282,662,648

1 - 2011 and 2012 from City of Cleveland Division of Water Actuals
2 - 2013 through 2015 projected from City of Cleveland Division of
Water Comprehensive Financial Plan Report and Water Rate
Study escalations, Final Report March 2011, p. 3-5

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Table 2
Cleveland Water District
Westlake Analysis
Projected Change in Budget Category

Category	2011	2012	2013	2014	2015	2016	2017	2018	2019
Salaries and Wages	NA	1.59%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Employee Benefits	NA	-1.18%	3.54%	1.08%	3.52%	2.71%	2.71%	2.71%	2.71%
Training & Professional Dues	NA	49.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Utilities	NA	-2.76%	5.94%	5.61%	5.31%	5.62%	5.62%	5.62%	5.62%
Contractual Services	NA	9.53%	2.71%	2.63%	2.57%	2.64%	2.64%	2.64%	2.64%
Materials & Supplies	NA	19.17%	4.77%	4.55%	4.35%	4.56%	4.56%	4.56%	4.56%
Maintenance	NA	-7.71%	2.71%	2.63%	2.57%	2.64%	2.64%	2.64%	2.64%
Claims Refunds Misc	NA	2.39%	2.70%	2.66%	2.56%	2.64%	2.64%	2.64%	2.64%
Interdepartmental Service Charges	NA	0.44%	2.71%	2.64%	2.56%	2.63%	2.63%	2.63%	2.63%

1 - 2013 through 2015 projected from City of Cleveland Division of
Water Comprehensive Financial Plan Report and Water Rate
Study escalations, Final Report March 2011, p. 3-5
2 -2016 forward projected from average percentage increases
from 2012 through 2015

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Table 2
Cleveland Water District
Westlake Analysis
Projected Change in Budget Category

Category	2020	2021	2022	2023	2024	2025	2026	2027	2028
Salaries and Wages	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Employee Benefits	2.71%	2.71%	2.71%	2.71%	2.71%	2.71%	2.71%	2.71%	2.71%
Training & Professional Dues	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Utilities	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%	5.62%
Contractual Services	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%
Materials & Supplies	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%
Maintenance	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%
Claims Refunds Misc	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%	2.64%
Interdepartmental Service Charges	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%	2.63%

1 - 2013 through 2015 projected from City of Cleveland Division of
Water Comprehensive Financial Plan Report and Water Rate
Study escalations, Final Report March 2011, p. 3-5
2 -2016 forward projected from average percentage increases
from 2012 through 2015

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Table 2
Cleveland Water District
Westlake Analysis
Projected Change in Budget Category

Category	2029	2030	2031	2032	2033
Salaries and Wages	2.00%	2.00%	2.00%	2.00%	2.00%
Employee Benefits	2.71%	2.71%	2.71%	2.71%	2.71%
Training & Professional Dues	0.00%	0.00%	0.00%	0.00%	0.00%
Utilities	5.62%	5.62%	5.62%	5.62%	5.62%
Contractual Services	2.64%	2.64%	2.64%	2.64%	2.64%
Materials & Supplies	4.56%	4.56%	4.56%	4.56%	4.56%
Maintenance	2.64%	2.64%	2.64%	2.64%	2.64%
Claims Refunds Misc	2.64%	2.64%	2.64%	2.64%	2.64%
Interdepartmental Service Charges	2.63%	2.63%	2.63%	2.63%	2.63%

1 - 2013 through 2015 projected from City of Cleveland Division of
Water Comprehensive Financial Plan Report and Water Rate
Study escalations, Final Report March 2011, p. 3-5
2 -2016 forward projected from average percentage increases
from 2012 through 2015

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Table 3
Cleveland Water District
Westlake Analysis
O&M Budget Category Adjustment for Variable Costs for Stranded Costs Analysis

Budget	Customer Account Services	Plant Operations	Budget and Finance	Information Technology	Distribution and Maintenance	Admin/Water Management	Engineering
Salaries and Wages	71.81%	0.00%	0.00%	0.00%	3.11%	0.00%	0.00%
Employee Benefits	71.81%	0.00%	0.00%	0.00%	3.11%	0.00%	0.00%
Training & Professional Dues	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Utilities	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Contractual Services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Materials & Supplies	0.00%	100.00%	0.00%	0.00%	3.11%	0.00%	0.00%
Maintenance	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.11%
Claims Refunds Misc	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
Interdepartmental Service Charges	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

1 - Assumes reduction of employees in Customer Account Services and Distribution and Maintenance per Cleveland Water Staff July 16 and July 30, 2013

2- Based on review of customer service representatives and proportion of miles of pipe in Westlake to total distribution system miles per Cleveland Water Staff July 30, 2013

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Table 4
Cleveland Water District
Westlake Analysis
O&M Budget Variable Cost Projection by Section

Section	2011	2012	2013	2014	2015	2016	2017	2018	2019
Customer Account Services	7,645,631	8,457,268	8,665,206	8,814,471	9,030,910	9,231,006	9,435,633	9,644,895	9,858,900
Plant Operations	25,389,977	27,277,893	28,798,314	30,319,502	31,840,691	33,526,863	35,303,089	37,174,215	39,145,350
Budget and Finance	0	0	0	0	0	0	0	0	0
Information Technology	0	0	0	0	0	0	0	0	0
Distribution and Maintenance	988,501	978,353	1,003,881	1,023,520	1,049,946	1,075,076	1,100,860	1,127,317	1,154,468
Admin/Water Management	3,048,811	3,121,572	3,205,772	3,290,999	3,375,200	3,464,242	3,555,634	3,649,436	3,745,714
Engineering	249,261	235,199	241,571	247,923	254,294	260,998	267,878	274,939	282,187
Total	37,322,181	40,070,286	41,914,744	43,696,416	45,551,041	47,558,185	49,663,093	51,870,803	54,186,619

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Table 4
Cleveland Water District
Westlake Analysis
O&M Budget Variable Cost Projection by Section

Section	2020	2021	2022	2023	2024	2025	2026	2027	2028
Customer Account Services	10,077,758	10,301,581	10,530,484	10,764,586	11,004,007	11,248,871	11,499,304	11,755,437	12,017,402
Plant Operations	41,221,880	43,409,482	45,714,142	48,142,171	50,700,220	53,395,304	56,234,818	59,226,556	62,378,739
Budget and Finance	0	0	0	0	0	0	0	0	0
Information Technology	0	0	0	0	0	0	0	0	0
Distribution and Maintenance	1,182,332	1,210,932	1,240,287	1,270,421	1,301,357	1,333,118	1,365,730	1,399,218	1,433,609
Admin/Water Management	3,844,531	3,945,955	4,050,055	4,156,901	4,266,566	4,379,124	4,494,651	4,613,227	4,734,930
Engineering	289,626	297,261	305,097	313,140	321,394	329,867	338,562	347,487	356,647
Total	56,616,127	59,165,210	61,840,065	64,647,218	67,593,544	70,686,284	73,933,066	77,341,925	80,921,327

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Table 4
Cleveland Water District
Westlake Analysis
O&M Budget Variable Cost Projection by Section

Section	2029	2030	2031	2032	2033
Customer Account Services	12,285,334	12,559,374	12,839,662	13,126,346	13,419,575
Plant Operations	65,700,033	69,199,575	72,886,999	76,772,463	80,866,679
Budget and Finance	0	0	0	0	0
Information Technology	0	0	0	0	0
Distribution and Maintenance	1,468,929	1,505,208	1,542,473	1,580,757	1,620,089
Admin/Water Management	4,859,844	4,988,054	5,119,646	5,254,709	5,393,336
Engineering	366,049	375,699	385,602	395,767	406,200
Total	84,680,189	88,627,908	92,774,383	97,130,043	101,705,878

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Table 5
Cleveland Water District
Westlake Analysis
O&M Section Fixed Costs for Stranded Cost Analysis

Section	2011	2012	2013	2014	2015	2016	2017	2018	2019
Customer Account Services	\$6,281,214	\$7,989,773	\$8,199,675	\$8,386,513	\$8,599,708	\$8,813,512	\$9,032,758	\$9,257,590	\$9,488,153
Plant Operations	15,973,929	14,733,839	15,098,296	15,384,937	15,761,348	16,120,129	16,487,261	16,862,943	17,247,379
Budget and Finance	2,333,112	2,420,401	2,482,243	2,530,153	2,594,187	2,655,120	2,717,607	2,781,690	2,847,415
Information Technology	11,956,218	11,495,833	11,834,935	12,150,077	12,493,180	12,847,298	13,212,897	13,590,416	13,980,310
Distribution and Maintenance	37,958,752	36,715,990	37,691,815	38,483,927	39,487,288	40,461,386	41,461,643	42,488,843	43,543,800
Admin/Water Management	16,992,797	18,498,957	18,993,303	19,424,942	19,929,117	20,432,258	20,949,182	21,480,304	22,026,055
Engineering	15,993,907	14,872,553	15,276,891	15,638,677	16,049,507	16,463,896	16,889,832	17,327,675	17,777,800
Total	\$107,489,928	\$106,727,347	\$109,577,158	\$111,999,226	\$114,914,337	\$117,793,600	\$120,751,179	\$123,789,461	\$126,910,912

1- Costs assigned less proportion estimated for Salaries and Wages, Employee Benefits, Utilities, Materials & Supplies, Maintenance, and Claims, Refunds, Misc.

Appendix C

Table 5
Cleveland Water District
Westlake Analysis
O&M Section Fixed Costs for Stranded Cost Analysis

Section	2020	2021	2022	2023	2024	2025	2026	2027	2028
Customer Account Services	\$9,724,598	\$9,967,079	\$10,215,757	\$10,470,793	\$10,732,356	\$11,000,617	\$11,275,755	\$11,557,950	\$11,847,390
Plant Operations	17,640,776	18,043,349	18,455,315	18,876,899	19,308,330	19,749,842	20,201,677	20,664,081	21,137,306
Budget and Finance	2,914,828	2,983,979	3,054,916	3,127,691	3,202,357	3,278,969	3,357,583	3,438,258	3,521,054
Information Technology	14,383,057	14,799,153	15,229,120	15,673,500	16,132,863	16,607,802	17,098,939	17,606,922	18,132,432
Distribution and Maintenance	44,627,355	45,740,376	46,883,764	48,058,450	49,265,397	50,505,601	51,780,096	53,089,951	54,436,271
Admin/Water Management	22,586,880	23,163,239	23,755,608	24,364,477	24,990,358	25,633,775	26,295,273	26,975,418	27,674,791
Engineering	18,240,595	18,716,461	19,205,815	19,709,090	20,226,733	20,759,210	21,307,004	21,870,616	22,450,565
Total	\$130,118,089	\$133,413,637	\$136,800,295	\$140,280,901	\$143,858,393	\$147,535,817	\$151,316,328	\$155,203,195	\$159,199,810

1- Costs assigned less proportion estimated for Salaries and Wages, Employee Benefits, Utilities, Materials & Supplies, Maintenance, and Claims, Refunds, Misc.

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Table 5
Cleveland Water District
Westlake Analysis
O&M Section Fixed Costs for Stranded Cost Analysis

Section	2029	2030	2031	2032	2033
Customer Account Services	\$12,144,268	\$12,448,780	\$12,761,130	\$13,081,526	\$13,410,184
Plant Operations	21,621,610	22,117,260	22,624,526	23,143,686	23,675,025
Budget and Finance	3,606,033	3,693,260	3,782,801	3,874,724	3,969,101
Information Technology	18,676,179	19,238,908	19,821,397	20,424,461	21,048,954
Distribution and Maintenance	55,820,204	57,242,936	58,705,698	60,209,764	61,756,454
Admin/Water Management	28,393,999	29,133,664	29,894,436	30,676,986	31,482,006
Engineering	23,047,393	23,661,661	24,293,951	24,944,869	25,615,045
Total	\$163,309,686	\$167,536,469	\$171,883,939	\$176,356,016	\$180,956,769

1- Costs assigned less proportion estimated for Salaries and Wages, Employee Benefits, Utilities, Materials & Supplies, Maintenance, and Claims, Refunds, Misc.

Appendix C

Table 6
Cleveland Water District
Westlake Analysis
O&M Section Stranded Costs Allocated to Low/1st High

Section	2011	2012	2013	2014	2015	2016	2017	2018	2019
Percentage Allocation									
Low									
Customer Account Services	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
Plant Operations	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Budget and Finance	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
Information Technology	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
Distribution and Maintenance	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
Admin/Water Management	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%
Engineering	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%
1st high									
Customer Account Services	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Plant Operations	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%
Budget and Finance	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Information Technology	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Distribution and Maintenance	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%
Admin/Water Management	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%
Engineering	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%
Costs Allocated									
Low									
Customer Account Services	\$387,551	\$492,969	\$505,920	\$517,448	\$530,602	\$543,794	\$557,321	\$571,193	\$585,419
Plant Operations	1,030,318	950,333	973,840	992,328	1,016,607	1,039,748	1,063,428	1,087,660	1,112,456
Budget and Finance	143,953	149,339	153,154	156,110	160,061	163,821	167,676	171,630	175,685
Information Technology	737,699	709,293	730,216	749,660	770,829	792,678	815,236	838,529	862,585
Distribution and Maintenance	2,106,711	2,037,737	2,091,896	2,135,858	2,191,545	2,245,607	2,301,121	2,358,131	2,416,681
Admin/Water Management	1,413,801	1,539,113	1,580,243	1,616,155	1,658,103	1,699,964	1,742,972	1,787,161	1,832,568
Engineering	967,631	899,789	924,252	946,140	970,995	996,066	1,021,835	1,048,324	1,075,557
Subtotal Low	\$6,787,664	\$6,778,573	\$6,959,520	\$7,113,700	\$7,298,742	\$7,481,678	\$7,669,590	\$7,862,628	\$8,060,951
1st High									
Customer Account Services	\$836,658	\$1,064,238	\$1,092,197	\$1,117,084	\$1,145,481	\$1,173,960	\$1,203,163	\$1,233,111	\$1,263,822
Plant Operations	2,089,390	1,927,186	1,974,857	2,012,350	2,061,584	2,108,513	2,156,534	2,205,673	2,255,957
Budget and Finance	310,771	322,397	330,635	337,016	345,546	353,662	361,985	370,521	379,276
Information Technology	1,592,568	1,531,245	1,576,413	1,618,390	1,664,092	1,711,260	1,759,958	1,810,243	1,862,177
Distribution and Maintenance	5,143,411	4,975,017	5,107,241	5,214,572	5,350,528	5,482,518	5,618,053	5,757,238	5,900,185
Admin/Water Management	2,494,543	2,715,647	2,788,217	2,851,581	2,925,594	2,999,456	3,075,340	3,153,309	3,233,425
Engineering	2,136,786	1,986,973	2,040,993	2,089,327	2,144,214	2,199,577	2,256,482	2,314,977	2,375,114
Subtotal 1st High	\$14,604,126	\$14,522,703	\$14,910,552	\$15,240,321	\$15,637,039	\$16,028,945	\$16,431,514	\$16,845,073	\$17,269,956
Total	\$21,391,789	\$21,301,276	\$21,870,073	\$22,354,020	\$22,935,781	\$23,510,622	\$24,101,104	\$24,707,701	\$25,330,907

1 - Percentage allocations from City of Cleveland Division of
Water Comprehensive Financial Plan Report and Water Rate
Study escalations, Final Report March 2011, p. 8-4

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Table 6
Cleveland Water District
Westlake Analysis
O&M Section Stranded Costs Allocated to Low/1st High

Section	2020	2021	2022	2023	2024	2025	2026	2027	2028
Percentage Allocation									
Low									
Customer Account Services	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
Plant Operations	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Budget and Finance	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
Information Technology	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
Distribution and Maintenance	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
Admin/Water Management	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%
Engineering	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%
1st high									
Customer Account Services	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Plant Operations	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%	13.1%
Budget and Finance	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Information Technology	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Distribution and Maintenance	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%
Admin/Water Management	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%
Engineering	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%	13.4%
Costs Allocated									
Low									
Customer Account Services	\$600,008	\$614,969	\$630,312	\$646,048	\$662,186	\$678,738	\$695,714	\$713,126	\$730,984
Plant Operations	1,137,830	1,163,796	1,190,368	1,217,560	1,245,387	1,273,865	1,303,008	1,332,833	1,363,356
Budget and Finance	179,845	184,111	188,488	192,979	197,585	202,312	207,163	212,141	217,249
Information Technology	887,435	913,108	939,637	967,055	995,398	1,024,701	1,055,005	1,086,347	1,118,771
Distribution and Maintenance	2,476,818	2,538,591	2,602,049	2,667,244	2,734,230	2,803,061	2,873,795	2,946,492	3,021,213
Admin/Water Management	1,879,228	1,927,182	1,976,467	2,027,125	2,079,198	2,132,730	2,187,767	2,244,355	2,302,543
Engineering	1,103,556	1,132,346	1,161,952	1,192,400	1,223,717	1,255,932	1,289,074	1,323,172	1,358,259
Subtotal Low	\$8,264,720	\$8,474,102	\$8,689,272	\$8,910,410	\$9,137,701	\$9,371,340	\$9,611,525	\$9,858,466	\$10,112,375
1st High									
Customer Account Services	\$1,295,316	\$1,327,615	\$1,360,739	\$1,394,710	\$1,429,550	\$1,465,282	\$1,501,931	\$1,539,519	\$1,578,072
Plant Operations	2,307,414	2,360,070	2,413,955	2,469,098	2,525,530	2,583,279	2,642,379	2,702,862	2,764,760
Budget and Finance	388,255	397,466	406,915	416,608	426,554	436,759	447,230	457,976	469,004
Information Technology	1,915,823	1,971,247	2,028,519	2,087,710	2,148,897	2,212,159	2,277,579	2,345,242	2,415,240
Distribution and Maintenance	6,047,007	6,197,821	6,352,750	6,511,920	6,675,461	6,843,509	7,016,203	7,193,688	7,376,115
Admin/Water Management	3,315,754	3,400,364	3,487,323	3,576,705	3,668,584	3,763,038	3,860,146	3,959,991	4,062,659
Engineering	2,436,944	2,500,519	2,565,897	2,633,134	2,702,292	2,773,431	2,846,616	2,921,914	2,999,396
Subtotal 1st High	\$17,706,512	\$18,155,102	\$18,616,098	\$19,089,886	\$19,576,868	\$20,077,457	\$20,592,084	\$21,121,193	\$21,665,246
Total	\$25,971,232	\$26,629,204	\$27,305,370	\$28,000,296	\$28,714,569	\$29,448,797	\$30,203,609	\$30,979,658	\$31,777,621

1 - Percentage allocations from City of Cleveland Division of
Water Comprehensive Financial Plan Report and Water Rate
Study escalations, Final Report March 2011, p. 8-4

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Table 6
Cleveland Water District
Westlake Analysis
O&M Section Stranded Costs Allocated to Low/1st High

Section	2029	2030	2031	2032	2033
Percentage Allocation					
Low					
Customer Account Services	6.2%	6.2%	6.2%	6.2%	6.2%
Plant Operations	6.5%	6.5%	6.5%	6.5%	6.5%
Budget and Finance	6.2%	6.2%	6.2%	6.2%	6.2%
Information Technology	6.2%	6.2%	6.2%	6.2%	6.2%
Distribution and Maintenance	5.6%	5.6%	5.6%	5.6%	5.6%
Admin/Water Management	8.3%	8.3%	8.3%	8.3%	8.3%
Engineering	6.1%	6.1%	6.1%	6.1%	6.1%
1st high					
Customer Account Services	13.3%	13.3%	13.3%	13.3%	13.3%
Plant Operations	13.1%	13.1%	13.1%	13.1%	13.1%
Budget and Finance	13.3%	13.3%	13.3%	13.3%	13.3%
Information Technology	13.3%	13.3%	13.3%	13.3%	13.3%
Distribution and Maintenance	13.6%	13.6%	13.6%	13.6%	13.6%
Admin/Water Management	14.7%	14.7%	14.7%	14.7%	14.7%
Engineering	13.4%	13.4%	13.4%	13.4%	13.4%
Costs Allocated					
Low					
Customer Account Services	\$749,301	\$768,090	\$787,362	\$807,130	\$827,408
Plant Operations	1,394,594	1,426,563	1,459,282	1,492,768	1,527,039
Budget and Finance	222,492	227,874	233,399	239,070	244,894
Information Technology	1,152,320	1,187,041	1,222,980	1,260,189	1,298,720
Distribution and Maintenance	3,098,021	3,176,983	3,258,166	3,341,642	3,427,483
Admin/Water Management	2,362,381	2,423,921	2,487,217	2,552,325	2,619,303
Engineering	1,394,367	1,431,530	1,469,784	1,509,165	1,549,710
Subtotal Low	\$10,373,477	\$10,642,002	\$10,918,190	\$11,202,289	\$11,494,558
1st High					
Customer Account Services	\$1,617,616	\$1,658,178	\$1,699,783	\$1,742,459	\$1,786,236
Plant Operations	2,828,107	2,892,938	2,959,288	3,027,194	3,096,693
Budget and Finance	480,324	491,942	503,869	516,113	528,684
Information Technology	2,487,667	2,562,623	2,640,210	2,720,538	2,803,721
Distribution and Maintenance	7,563,638	7,756,418	7,954,622	8,158,423	8,368,000
Admin/Water Management	4,168,239	4,276,822	4,388,503	4,503,381	4,621,559
Engineering	3,079,132	3,161,198	3,245,672	3,332,634	3,422,170
Subtotal 1st High	\$22,224,722	\$22,800,118	\$23,391,947	\$24,000,744	\$24,627,063
Total	\$32,598,199	\$33,442,120	\$34,310,137	\$35,203,033	\$36,121,621

1 - Percentage allocations from City of Cleveland Division of Water Comprehensive Financial Plan Report and Water Rate Study escalations, Final Report March 2011, p. 8-4

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Table 7
Cleveland Water District
Westlake Analysis
Total Water Demand Forecast - Billable Water (MCFs)

Customer	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cleveland						0	0	0	0
Direct Service Suburbs									
Low	1,537,899	1,605,622	1,475,202	1,438,413	1,403,131	1,368,714	1,335,142	1,302,394	1,270,448
1st High	1,626,624	1,698,254	1,560,310	1,521,398	1,484,081	1,447,679	1,412,170	1,377,532	1,343,743
2nd High						0	0	0	0
3rd High						0	0	0	0
Total	3,164,523	3,303,876	3,035,512	2,959,810	2,887,212	2,816,393	2,747,312	2,679,925	2,614,191
Total System Demand	5,914,998	6,175,468	5,673,853	5,532,355	5,396,656	5,264,285	5,135,162	5,009,205	4,886,338

1 - 2011 and 2012 Total System Demand and Low and 1st High provided by CWD Finance Dept. July 9, 2013

2 - 2013 through 2015 Total System Demand from City of Cleveland Division of Water Comprehensive Financial Plan report and Water Rate Study, Final Report March 2011, p. 5-16

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Table 7
Cleveland Water District
Westlake Analysis
Total Water Demand Forecast - Billable Water (MCFs)

Customer	2020	2021	2022	2023	2024	2025	2026	2027	2028
Cleveland	0	0	0	0	0	0	0	0	0
Direct Service Suburbs									
Low	1,239,286	1,208,889	1,179,237	1,150,312	1,122,097	1,094,574	1,067,726	1,041,537	1,015,989
1st High	1,310,784	1,278,632	1,247,270	1,216,676	1,186,833	1,157,722	1,129,326	1,101,625	1,074,604
2nd High	0	0	0	0	0	0	0	0	0
3rd High	0	0	0	0	0	0	0	0	0
Total	2,550,070	2,487,521	2,426,507	2,366,989	2,308,930	2,252,296	2,197,052	2,143,162	2,090,594
 Total System Demand	 4,766,485	 4,649,571	 4,535,525	 4,424,277	 4,315,757	 4,209,899	 4,106,638	 4,005,909	 3,907,651

1 - 2011 and 2012 Total System Demand and Low and 1st High provided by CWD Finance Dept. July 9, 2013

2 - 2013 through 2015 Total System Demand from City of Cleveland Division of Water Comprehensive Financial Plan report and Water Rate Study, Final Report March 2011, p. 5-16

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Table 7
Cleveland Water District
Westlake Analysis
Total Water Demand Forecast - Billable Water (MCFs)

Customer	2029	2030	2031	2032	2033
Cleveland	0	0	0	0	0
Direct Service Suburbs					
Low	991,069	966,760	943,047	919,916	897,352
1st High	1,048,246	1,022,534	997,453	972,988	949,122
2nd High	0	0	0	0	0
3rd High	0	0	0	0	0
Total	2,039,315	1,989,294	1,940,500	1,892,903	1,846,474
 Total System Demand	 3,811,803	 3,718,306	 3,627,103	 3,538,136	 3,451,352

1 - 2011 and 2012 Total System Demand and Low and 1st High
provided by CWD Finance Dept. July 9, 2013

2 - 2013 through 2015 Total System Demand from City of
Cleveland Division of Water Comprehensive Financial Plan
report and Water Rate Study, Final Report March 2011, p. 5-16

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Table 8
Cleveland Water District
Westlake Analysis
Westlake Water Demand (MCFs)

Customer	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cleveland	0	0	0	0	0	0	0	0	0
Westlake									
Low	43,899	47,765	43,885	42,791	41,741	40,717	39,719	38,744	37,794
1st High	112,884	122,825	112,848	110,034	107,335	104,702	102,134	99,629	97,185
2nd High	0	0	0	0	0	0	0	0	0
3rd High	0	0	0	0	0	0	0	0	0
Total	156,783	170,590	156,733	152,825	149,076	145,420	141,853	138,373	134,979

1 - 2011 and 2012 Westlake Demand provided by CWD
Finance Dept. July 9, 2013

2 - 2013 through 2015 percentage change estimated from City
of Cleveland Division of Water Comprehensive Financial Plan
report and Water Rate Study, Final Report March 2011, p. 5-16

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Table 8
Cleveland Water District
Westlake Analysis
Westlake Water Demand (MCFs)

Customer	2020	2021	2022	2023	2024	2025	2026	2027	2028
Cleveland	0	0	0	0	0	0	0	0	0
Westlake									
Low	36,867	35,963	35,081	34,220	33,381	32,562	31,763	30,984	30,224
1st High	94,801	92,476	90,208	87,995	85,837	83,731	81,678	79,674	77,720
2nd High	0	0	0	0	0	0	0	0	0
3rd High	0	0	0	0	0	0	0	0	0
Total	131,669	128,439	125,289	122,215	119,218	116,293	113,441	110,658	107,944

1 - 2011 and 2012 Westlake Demand provided by CWD
Finance Dept. July 9, 2013

2 - 2013 through 2015 percentage change estimated from City
of Cleveland Division of Water Comprehensive Financial Plan
report and Water Rate Study, Final Report March 2011, p. 5-16

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Table 8
Cleveland Water District
Westlake Analysis
Westlake Water Demand (MCFs)

Customer	2029	2030	2031	2032	2033
Cleveland	0	0	0	0	0
Westlake					
Low	29,483	28,760	28,054	27,366	26,695
1st High	75,814	73,954	72,140	70,371	68,645
2nd High	0	0	0	0	0
3rd High	0	0	0	0	0
Total	105,297	102,714	100,194	97,737	95,340

1 - 2011 and 2012 Westlake Demand provided by CWD
Finance Dept. July 9, 2013

2 - 2013 through 2015 percentage change estimated from City
of Cleveland Division of Water Comprehensive Financial Plan
report and Water Rate Study, Final Report March 2011, p. 5-16

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Table 9
Cleveland Water District
Westlake Analysis
Water Demand - Proportion for Westlake (MCFs)

Customer	2011	2012	2013	2014	2015	2016	2017	2018	2019
Cleveland	0	0	0	0	0	0	0	0	0
Direct Service Suburbs									
Low	2.85%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%
1st High	6.94%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%
2nd High	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3rd High	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Weighted Average								5.88%	5.88%

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Table 9
Cleveland Water District
Westlake Analysis
Water Demand - Proportion for Westlake (MCFs)

Customer	2020	2021	2022	2023	2024	2025	2026	2027	2028
Cleveland	0	0	0	0	0	0	0	0	0
Direct Service Suburbs									
Low	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%	2.97%
1st High	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%	7.23%
2nd High	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3rd High	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Weighted Average	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%

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Table 9
Cleveland Water District
Westlake Analysis
Water Demand - Proportion for Westlake (MCFs)

Customer	2029	2030	2031	2032	2033
Cleveland	0	0	0	0	0
Direct Service Suburbs					
Low	2.97%	2.97%	2.97%	2.97%	2.97%
1st High	7.23%	7.23%	7.23%	7.23%	7.23%
2nd High	0.00%	0.00%	0.00%	0.00%	0.00%
3rd High	0.00%	0.00%	0.00%	0.00%	0.00%
Weighted Average	5.88%	5.88%	5.88%	5.88%	5.88%

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Table 10
Cleveland Water District
Westlake Analysis
Stranded O&M Costs - Westlake

	1	2	3	4	5	6
Item	2018	2019	2020	2021	2022	2023
Fixed Operating Costs to Westlake	\$1,452,210	\$1,488,839	\$1,526,475	\$1,565,147	\$1,604,890	\$1,645,734
Discount rate	2.5%					
Present Value in 2013 (2018 - 2033 Costs)	\$20,611,545					

1 - Discount rate equal to nominal interest rates on Treasury Notes and Bonds with a 30-year maturity; Office of Management and Budget, Circular A-94 Appendix C, December 2012

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Table 10
Cleveland Water District
Westlake Analysis
Stranded O&M Costs - Westlake

	7	8	9	10	11	12	13
Item	2024	2025	2026	2027	2028	2029	2030
Fixed Operating Costs to Westlake	\$1,687,717	\$1,730,872	\$1,775,237	\$1,820,851	\$1,867,752	\$1,915,983	\$1,965,587

Discount rate

Present Value in 2013 (2018 - 2033 Costs)

1 - Discount rate equal to nominal interest rates on Treasury
Notes and Bonds with a 30-year maturity; Office of
Management and Budget, Circular A-94 Appendix C,
December 2012

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Table 10
Cleveland Water District
Westlake Analysis
Stranded O&M Costs - Westlake

	14	15	16
Item	2031	2032	2033
Fixed Operating Costs to Westlake	\$2,016,607	\$2,069,089	\$2,123,082

Discount rate

Present Value in 2013 (2018 - 2033 Costs)

1 - Discount rate equal to nominal interest rates on Treasury
Notes and Bonds with a 30-year maturity; Office of
Management and Budget, Circular A-94 Appendix C,
December 2012